

**Gordon Institute
of Business Science**
University of Pretoria

**Organisational support and job satisfaction as
moderators on the relationship between
psychological contract breach and work
engagement.**

Tjaart van der Westhuizen

14445353

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

9 November 2015

Abstract:

The objectives of this study were focussed on exploring the relationship between the individual constructs psychological contract breach (PCB), job satisfaction, organisational support and that of work engagement to add to previous literature. The relationship between PCB and work engagement has been previously researched and two different views are held. One that believes there is no direct relationship between PCB and work engagement, and one that believes there is a direct relationship. These different views confirm the complexity of the relationship that exist between PCB and work engagement. To explore this complex relationship we introduced two moderators to ascertain their moderating effect individually on the relationship between PCB and work engagement. The benefits to organisations and employees when work engagement levels are high have been researched and confirmed.

An online survey specifically addressing the research objectives was sent out to members of a service organisation who are employed at different organisations across various industries within South Africa. A total of 1029 responses were analysed, using simple linear regression models to determine the relationship between psychological contract breach, job satisfaction and organisational support individually and work engagement and multi variable regression models were used to determine the moderating effect that job satisfaction and organisational support has as moderators on the relationship between psychological contract breach and work engagement.

For the sample population, it was determined that this study support the view that there is a significant direct relationship between PCB breach and work engagement as well as between job satisfaction and work engagement and organisational support and work engagement. It was determined that job satisfaction has a moderating effect on the relationship that exist between psychological contract breach and work engagement and that organisational support does not have a moderating effect on the relationship.

Keywords:

Work engagement: %a positive, fulfilling work-related state of mind that is characterised by vigour, dedication and absorption+(Schaufeli, Bakker, & Salanova, 2006, p. 702).

Psychological contract breach: %Perceived breach refers to the cognition that one's organization has failed to meet one or more obligations within one's psychological contract in a manner commensurate with one's contributions+(Morrison & Robinson, 1997, p. 230).

Organisational support: %employees in an organization form global beliefs concerning the extent to which the organisation values their contributions and cares about their well-being,+(Eisenberger, Huntington, Hutchison & Sowa, 1986, p. 500)

Job satisfaction: %Job satisfaction is the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values.+ (Locke, 1969, p. 316)

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Tjaart van der Westhuizen

9 November 2015

Acknowledgements:

My appreciation goes to the following:

My supervisor . Dr Caren Scheepers, for the support and guidance that she provided me with for my research project.

My supervisor assistant . Dr Tumo Kele, for his input and guidance.

My statistician . Prof Piet Bekker for assistance and guidance ensuring I understood the technical concepts.

My editor . Kathleen Wood, for her contribution.

My employer . Thanks for giving me the opportunity.

My colleagues . For their support.

My family . for affording me the opportunity, their continued support and patience.

“Far and away the best prize that life has to offer is the chance to work hard at work worth doing.”

Theodore Roosevelt

List of Acronyms & Abbreviations:

JD-R	Job Demand . Resources model
PCB	psychological contract breach
SET	Social Exchange Theory
POS	perceived organisational support
PSC	psychosocial safety climate

Table of Contents

Abstract:.....	ii
Keywords:	iii
Declaration.....	iv
Acknowledgements:.....	v
List of Acronyms & Abbreviations:.....	vii
Table of figures:.....	x
Tables:.....	xi
Chapter 1: Introduction to research problem	1
1.1 Chapter introduction	1
1.2 Research motivation.....	2
1.3 Research problem.....	5
1.4 Research objectives	5
1.5 Research scope	6
Chapter 2: Theory and literature review.....	7
2.1 Important constructs	7
2.2 Work engagement.....	7
2.2.1 Theory development.....	7
2.2.2 Antecedents and drivers of work engagement.....	16
2.2.3 Outcomes of work engagement.....	22
2.3 Job satisfaction.....	25
2.4 Organizational support	29
2.5 Psychological contract breach.....	33
2.6 Chapter conclusion	38
Chapter 3: Hypotheses.....	40
Chapter 4: Research methodology.....	41
4.1 Research method.....	41
4.2 Rationale for research method	41
4.3 Research process.....	42
4.4 Population and unit of analysis.....	42
4.5 Size and nature of sample	43
4.6 Survey design.....	43
4.7 Pilot Survey	45
4.8 Data collection, data analysis and management.....	45

4.9 Reliability and Validity.....	46
4.9.1 Reliability	46
4.9.2 Validity.....	48
4.10 Data analysis.....	51
4.11 Research limitations	53
Chapter 5: Results	54
5.1 Chapter introduction	54
5.2 Descriptive statistics	54
5.2.1 Gender	54
5.2.2 Age	55
5.2.3 Tenure.....	57
5.2.4 Descriptive statistics of full sample.....	58
5.3 Results	59
5.3.1 Objective 1	59
5.3.2 Objective 2.....	60
5.3.3 Objective 3.....	61
5.3.4 Objective 4.....	62
5.3.5 Objective 5.....	64
5.3.6 Summary table	65
Chapter 6: Discussion of results	66
6.1 Chapter introduction	66
6.2 Discussion of results.....	66
6.2.1 Objective 1 . Discussion of results	66
6.2.2 Objective 2 . Discussion of results:	68
6.2.3 Objective 3 . Discussion of results:	70
6.2.4 Objective 4 . Discussion of results	72
6.2.5 Objective 5 . Discussion of results.	74
Chapter 7: Conclusion	76
7.1 Chapter introduction and main findings	76
7.2 Managerial implications.....	78
7.2.1 Psychological contract breach	79
7.2.2 Organisational support	80
7.2.3 Job satisfaction	81
7.2.4 Work engagement.....	82
7.3 Limitations to the research	83
7.4 Recommendations for future research.....	83

7.5 Conclusion.....	84
References.....	85
Appendix 1: Online Survey.....	94
Appendix 2: Ethical clearance letter	100
Appendix 3: Turnitin report.....	101

Table of figures:

Figure 1: %The J D-R Model of work engagement+(Bakker & Demerouti, 2008, p. 218).	18
Figure 2: %The JD-R model of work engagement adjusted to include job crafting which fosters a positive gain spiral+(Bakker, 2011, p. 267)	19
Figure 3: %Summary of the meta-analytic path analysis of the conventional and differentiated job demands resource model+(Crawford et al., 2010, p. 841).....	20
Figure 4: %Structural model with engagement and other affective motivational states+ (Rich et al., 2010, p. 627)	21
Figure 5: %A two-dimensional view of work-related subjective well-being+(Bakker et al., 2012, p.16).....	24
Figure 6: %Four determinants of satisfaction and dissatisfaction by Rue and Byaes 2003+(as cited in Aziri, 2011, p. 79)	27
Figure 7: %Hygiene and motivational factors as per Herzberg in 1976+(as cited in Aziri, 2011, p.80).....	27
Figure 8: %A model of predictors and outcomes of work engagement+(Mache et al., 2014, p. 184).....	28
Figure 9: %Overview of theory and findings+(Eisenberger & Stinglhamber, 2011, p. 40)	32
Figure 10: %The development of psychological contract violation+(Morrison & Robinson, 1997, p. 232).....	35
Figure 11: %The process of making sense of psychological contract breach+(Parzefall & Coyle-Shapiro, 2011, p. 22).....	37
Figure 12: %The research onion (Adapted from Saunders, Lewis & Thornhill, 2008, cited in Saunders & Lewis, 2012, p.103).....	41
Figure 13: Scree plot of eigenvalues after factor analysis.....	48
Figure 14: Female respondents and Male respondents.....	54
Figure 15: Age of respondents.	55

Figure 16: Tenure at current company.....	57
Figure 17: Impact of job satisfaction as moderator on the relationship between PCB and work engagement.....	63
Figure 18: Alternative hypothesis 1.....	66
Figure 19: Alternative hypothesis 2.....	68
Figure 20: %A taxonomy from work-related well-being adapted from Russell, 1980+ (Blackwell, 2014, p. 302).....	69
Figure 21: Alternative hypothesis 3.....	70
Figure 22: %The effect that organizational support has on work engagement and the consequences adjusted+(Caesens & Stinglhamber, 2014, p. 264-265).....	71
Figure 23: Alternative hypothesis 4.....	72
Figure 24: Null hypothesis 5.....	74

Tables:

Table 1: The Cronbach's alphas and item analysis.....	47
Table 2: Factor analysis - Principle factor analysis (Unrotated).....	48
Table 3: Factor loadings.....	49
Table 4: Rotated factor loadings - Oblique Oblimin rotation pattern and unique matrix.....	50
Table 5: Kaiser-Meyer-Olkin (KMO).....	51
Table 6: An example that illustrates the change in negative questions.....	52
Table 7: Mean scores across gender.....	55
Table 8: Mean scores across age brackets.....	56
Table 9: Mean scores across tenure.....	58
Table 10: Means, Standard Deviations (SD), Reliabilities (Cronbach's Alpha) and Pearson's correlations (r) for all variables.....	58
Table 11: Objective 1 . Statistical analysis.....	59
Table 12: Objective 2 . Statistical analysis.....	60
Table 13: Objective 3 . Statistical analysis.....	61
Table 14: Objective 4 - Statistical analysis.....	62
Table 15: Objective 5 - Statistical analysis.....	64
Table 16: Summary of objectives.....	65

Chapter 1: Introduction to research problem

1.1 Chapter introduction

The findings in a recent study by Rayton and Yalabik (2014) entitled 'Work engagement, psychological contract breach and job satisfaction' confirmed that the relationship between psychological contract breach (PCB) and work engagement is more complicated than that suggested by research previously done. Their research is built on work done by Kahn (1990) and Saks (2006) on work engagement. It extended the Social Exchange Theory (SET) and the Job Demand. Resources (JD-R) model by exploring the relationship between PCB and work engagement, and included job satisfaction as a mediator in the relationship. Their study suggests that PCB affects work engagement but that this relationship works via the impact that job satisfaction has as a mediator on PCB (Rayton & Yalabik, 2014).

In line with Kahn's view that people can vary the degree of their physical, cognitive and emotional selves in their roles while they maintain the boundaries of integrity between themselves and the roles they play, Rayton & Yalabik (2014) found that when employees feel their organisation meets its obligations, the employees are content in their jobs and it therefore transpires that their work engagement is more probable (Kahn, 1990; Rayton & Yalabik, 2014). They confirmed that job satisfaction is a mediator on the relationship between psychological contract breach and work engagement and that work engagement is adversely affected by psychological contract breach but that this adverse effect is reduced by job satisfaction as a mediator through its impact on psychological contract breach (Rayton & Yalabik, 2014). In addition to such evidence in support of previous research they found that, similar to the JD-R model, when an important resource is lost it has a negative impact on the attitudes of employees and reduces the level at which employees are activated (Rayton & Yalabik, 2014).

Some of the most recent work done on job satisfaction as a moderator in the workplace includes that of Wulandari, Mangundjaya and Utoyo (2015) where they explore whether job satisfaction is a moderator or a mediator in the relationship between change leadership and commitment to change (Wulandari, Mangundjaya & Utoyo, 2015) This study will explore the moderating effect that job satisfaction has on the relationship between PCB and work engagement.

Included in the limitations of the study done by Rayton & Yalibik (2014) is the fact that having done a survey of 191 employees at one company in the United Kingdom. Rayton & Yalibik recommended that future research be done on other antecedents of work engagement like organizational support. This study, then, is to further explore the moderating effect that organizational support has on the relationship between psychological contract breach and work engagement. In addition, it was also recommended by previous researchers that future research be extended to other organisations with different jobs, and across industries in more countries worldwide. This study intends to add to previous literature by exploring the moderating effect that organizational support and job satisfaction have on PCB and work engagement. In addition, this study focusses on a larger sample size across various corporate, occupational and industrial contexts in South Africa.

1.2 Research motivation

The importance of work engagement by employees has been researched and was found to have a significant impact on the success of the employees and ultimately the company they work for (Scrima, Lorito, Lucrezia & Falgares, 2014). Since the first work done on engagement by Kahn in 1990, the topic remained dormant, with almost no citations made in the first 20 years after Kahn's article. Recently, however, the topic has become very active with more than 1 800 citations most of them in the last five years (Saks & Gruman, 2014). In times of economic difficulty and uncertainty, such as currently experienced in South Africa and globally, it becomes even more important for organisations to have an engaged (and thus also focussed and committed) workforce that believe in the organisation's goals. Ensuring that a workforce is engaged can assist in retaining an organisation's pool of talent during difficult times as, in such times, employees are required to increase their efforts. These capable employees will be committed by delivering the extra effort required to ensure that the organisation continues to exist (Scrima et al., 2014). Since these organisations might not be able to satisfy employees' needs with extrinsic rewards (such as pay) in these difficult economic times, they should, therefore, focus on the intrinsic rewards, such as job satisfaction and organizational support.

It stands to reason that if an organisation is successful in ensuring that its workforce is engaged in uncertain and difficult times it will increase productivity which will result in a competitive advantage for the organisation. A competitive advantage has been

described as the relevant performance of rivals in a given market environment. A firm is said to have a competitive advantage when it enjoys greater success than their competitors in its industry (Peteraf & Barney, 2003).

This kind of success will increase the beliefs of staff in the organisation and ensure that the organisation will attract talent to the company. Such was the case of Yahoo when it was able to address internal issues to overcome external challenges, after which it experienced an increase in applications, 14 per cent of whom were previous employees (Yeung, 2013).

It has been shown that engagement levels are low in organisations worldwide (Gallup Inc., 2013). It is extremely beneficial to an organisation, if they are successful, to ensure that staff are engaged since increased performance translates into profitability (Harter, Schmidt & Keyes, 2002). Therefore, organisations that ensure their workforces are engaged have a lot to gain financially and this would also ensure that they can face rivals and challenges in difficult and uncertain economic environments.

The construct of work engagement as an academic research area as well as the relationship with other constructs like psychological contracts, job satisfaction and organizational support are all growing research areas. They present opportunities - if better understood - for organisations to ensure that they and their employees will be able to achieve higher levels of engagement (Rayton & Yalabik, 2014). Currently, Adcorp (labour specialists) has indicated that the retrenchment rate in South Africa is at a ten-year high while the job mobility rate is at a ten-year low. They estimate that almost 4.6 million people are unemployed in South Africa with youth unemployment being one of the major concerns. The expectation is that this can lead to agitation as workers see real income gains being eroded (Maswanganyi, 2014). It is important to remember that the first phase of most turnarounds is ensuring there is enough cash to execute it. If one does not have the resources, one cannot hire or hold on to talented people. This was the experience at BMC Software when Robert Beauchamp the CEO ensured success by attracting the best people he could find in a variety of industries. These people were loyal to him without agendas other than to make BMC successful (Ederle, 2014).

In the first instance, psychological contracts are an important factor. They are seen as stable unless information is not shared transparently about the changes experienced (Chaundhry & Song, 2014). To be proactive by learning one another's concerns and needs before disruptions take place can enable employees to improve their ability to handle these changes before they take place (Tomprou, Rousseau & Hansen, 2015). Employees tend to be loyal and seek for career development opportunities within the

organisation (Scheepers & Shuping, 2011). In an era of turnarounds and retrenchments it is important to understand what processes can lessen the impact or increase support to soften the breach in psychological contracts and reduce the impact of these violations and also to structure post-violation psychological contracts to ensure work engagement (Tomprou et al., 2015).

In the current economic environment where organisations try to meet challenges including, but not limited to, globalisation and new opportunities in dynamic work environments it is important that organisations understand how victims of the process experience and comprehend these changes to ensure their employees remain a key source of sustained competitive advantage (Chaundhry & Song, 2014; Noer, 2009). Companies big and small are confronted with turnarounds (such as Alcatel-Lucent and Ford Motor Corporation) in order to survive (Hoffman, 2012; Ohanlon, 2014). Restructuring and changes can be as a result of renewing the strategy of the business. This is what happened at Lego, where a large number of experienced but seasoned designers retired in order to create opportunities for new innovating designers (Feloni, 2014).

When organisations are in distress, it impacts on the employees, whether as a result of unexpected reductions in staff, management replacements, loss of talent or union unrest (Yakola, 2014). Some companies, like South African Airways and Telkom, fall into a spiral of recurring turnarounds resulting in great difficulties to ensure staff stay engaged and effectively implement the required changes (Africa, 2015; Sapa, 2015). The interdependency that is created by the different psychological contracts increase emotions and are amplified by the lack of skills required when changes are essential (Scheepers & Schuping, 2011; Tomprou et al., 2015). Gallup indicates that those employees with a good job tend to have the highest wellbeing of those in the workforce (Clifton & Marlar, 2011) and they are more likely to be thriving (Clifton & Marlar, 2011).

In terms of job satisfaction, it has also been stated that this factor is not only about what an employee feels but also what he/she thinks (Rayton & Yalabik, 2014). In addition, employees who are satisfied with their jobs are more productive; show higher levels of organizational commitment; and they are less likely to leave the organisation (Adenike, 2011). These factors influence the performance and functioning of the organisation positively.

Therefore, organizational support is seen as an important antecedent for successful organisations; not only does this contribute to the success of the employee but in return, to the success of the organisation. Hence Marriott's philosophy: Take care of associates,

and they will take care of the customers (as cited in Moskowitz & Levering, 2015). It is believed that the relationship between the commitments of personal resources, job resources and positive outcomes not only benefit the worker but also benefit the companies because of the competitive advantage that they put in place (Scrima et al., 2014).

1.3 Research problem

Empirical evidence has shown that a negative relationship exists between PCB and job satisfaction (Rayton & Yalabik, 2014). It was also found that there is a relationship between job satisfaction and work engagement (Rayton & Yalabik, 2014). Although empirical evidence has shown no significant direct relationship between PCB and work engagement, there is an indirect effect of PCB on work engagement through job satisfaction at normal levels that is significant (Rayton & Yalabik, 2014). However, the writer has not yet found evidence of the moderating effect that job satisfaction and organizational support has on the relationship between PCB and work engagement.

This study, through its research findings, aims to explore how job satisfaction and organizational support moderate the relationship between PCB and work engagement. It is also hoped that this study will assist in an understanding of the relationship between organizational support, job satisfaction, PCB and work engagement. This better understanding should assist organisations and employees to increase work engagement levels through proactive approaches.

1.4 Research objectives

- Objective 1: Determine the relationship between psychological contract breach and work engagement.
- Objective 2: Determine the relationship between job satisfaction and work engagement
- Objective 3: Determine the relationship between organizational support and work engagement.
- Objective 4: Determine the moderating effect of job satisfaction on the relationship between psychological contract breach and work engagement.

- Objective 5: Determine the moderating effect of organizational support on the relationship between psychological contract breach and work engagement.

1.5 Research scope

The research is in the human behaviour field. The study is of an academic nature and will be conducted on a number of employees in various companies in different industries in South Africa. The findings can be applied generally to employees of companies globally.

Chapter 2: Theory and literature review

2.1 Important constructs

From the title of this study, *Organizational support and job satisfaction as moderators on the relationship between psychological contract breach and work engagement* the two core constructs become apparent; psychological contract breach and work engagement. Organizational support and job satisfaction are included as moderators.

2.2 Work engagement

2.2.1 Theory development

Engagement at work was first researched in 1990 for a better understanding of the term engagement in the context of the employee's work role. The research was done in the field of organizational psychology and business literature (Simpson, 2009). Four main themes were researched on this subject which include:

- a) personal engagement;
- b) engagement/burnout;
- c) work engagement; and
- d) employee engagement (Simpson, 2009).

William Kahn's seminal work on the personal engagement and disengagement of people at work explored the conditions that influenced this. He identified three components: (a) meaningfulness, (b) safety and (c) availability as psychological conditions that could explain the difference between how much people tend to contribute or choose not to contribute of themselves when performing their roles (Kahn, 1990). Kahn described personal engagement as "the employing or expressing of oneself physically, cognitively, and emotionally during work role performances" (Kahn, 1990, p.694). When an employee is engaged, he/she is understood to be involved physically, is cognitively vigilant, and connected emotionally (Simpson, 2009).

Allen and Meyer (1990) who defined organizational commitment/work engagement state that it is related to one's mind and behaviour which is best described by the

following three components: affective, continuance and normative commitment (as cited in Scrima et al., 2014) as follows:

- Affective commitment explains how an individual identifies with, is involved in, and attached emotionally to the organisation.
- Continuance commitment is better described as an inclination to continue with one's membership/affiliation of the organisation which is grounded on an acknowledgement of what the costs would be if one should consider leaving the organisation.
- Normative commitment is explained as a sense of loyalty that one has towards the organisation that is grounded on a supposed responsibility to be dedicated to same organisation (Scrima et al., 2014).

Although psychology has been studied for many years, the focus of these studies has been on negative psychology. The focus changed to positive psychology to scientifically better understand and achieve effective interventions that were needed to build thriving individuals, families and communities. The need to understand positive psychology was identified by Mihaly Csikszentmihalyi during World War II (Seligman & Csikszentmihalyi, 2000). They believed that if psychologists wanted to develop the human condition they should - apart from focussing on those who suffer - also focus on those who seem normal in order to reach a richer and fulfilling life experience (Seligman & Csikszentmihalyi, 2000). Work engagement is considered by some researchers to be one of these positive states and is considered to be the direct opposite for burnout (Schaufeli, Bakker & Salanova, 2006). Others consider work engagement to be a different concept that refers to vigour, dedication and absorption (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002). It is viewed important to review the underlying gap with regard to the link that exists between brief occurrences of happiness and long-term wellbeing (Seligman & Csikszentmihalyi, 2000).

Harter et al. (2002) examined the connections that exist at organizational level between a couple of constructs that include employee satisfaction-engagement and the organizational results of customer satisfaction, productivity, profit, employee turnover and accidents in order to assess the impact (Harter et al., 2002). Also in 2002 Schaufeli et al. (2002) referred to work engagement as a positive, fulfilling work related state of mind that is characterised by vigor, dedication and absorption. These characteristics have since formed the building blocks of work engagement (Bakker & Leiter, 2010; Scrima et al., 2014)

The three psychological conditions that Kahn identified in his study in 1990, namely: a) meaningfulness, b) safety and c) availability were included in a study done by May, Gilson and Harter (2004). The aim of the 2004 study was to explore the causes and mediating effect of these states on engagement at work (May et al., 2004; Simpson, 2009). Meaningfulness showed the greatest connection to engagement between meaningfulness, safety and availability. Psychological safety partially mediated the relationships between engagement and that of job enhancement and job fit (May et al., 2004). Then Leiter and Maslach (2004) did a two-year longitudinal study to explore the connections that exist between the three elements of:

- a) burnout/engagement;
- b) the six areas of work life; and
- c) employees' view of general alterations in the organisation (Leiter & Maslach, 2004).

The mediating connection that was found between the organizational setting and employees' perception of organizational change was burnout/engagement (Leiter et. Al., 2004). When Schaufeli and Bakker (2004) tested a model to understand the connection involving burnout and work engagement, as well as to determine if they are influenced by the same predictors and consequences, it was found that there is a negative relationship between burnout and work engagement. They found predictors of burnout that included job demands and a shortage of job resources while job resources exclusively predicted work engagement. It was also found to act as a mediator for the connection between job resources and the intention to leave (Schaufeli & Bakker, 2004).

These findings were supported by work done by Hakenen (as cited in Simpson, 2009) when he found that job resources are useful in coping with the demands in dentistry and that it assisted with staying engaged. He examined the relationship between job demands, job resources and work engagement (Simpson, 2009). The prediction of employee performance and customer loyalty with service climate as a mediator was examined in the same year. It was found that service climate is predicted by organizational resources and work engagement which, in turn, predicts customer loyalty and employee performance. (Salanova, Agut & Peiro, 2005).

The first study to make a distinction between job engagement and organizational engagement was done in 2006. In the study a variety of antecedents and consequences of job engagement and organizational engagement were also measured. The results provided support that there is a meaningful difference between job engagement and organizational engagement (Saks, 2006). It was found that perceived organizational

support predicts both job engagement and organisation engagement (Saks, 2006). In addition it was found that the relationship between the antecedents and job satisfaction, organizational commitment, intentions to quit and organizational citizenship behaviour is mediated by job engagement and organizational engagement (Saks, 2006). Schaufeli, Bakker and Salanova (2006) aimed to develop a short questionnaire to measure work engagement. They started out with a 17-item Utrecht scale which was reduced to 9 items (Schaufeli et al., 2006). The psychometric properties were acceptable and it was concluded that the instrument they developed, the UWES scale (Utrecht work engagement scale), can be used in studies on positive organizational behaviour.

In an effort to better understand burnout among teachers, a study was done using the JD-R model to explore the well-being of teachers. The proposal was that there are two parallel processes involved in the well-being of teachers at work. This was an energetic process that includes job demands (e.g. burnout) ill-health and a motivational process that includes job resources (e.g. engagement), and organizational commitment (Hakenen, Bakker & Schaufeli, 2006). Both processes were confirmed to be there; however, the energetic process seemed to be more present in that:

- a) the effect that high job demands had on ill health was mediated by burnout;
- b) the effects that job resources had on organizational commitment were mediated by work engagement; and
- c) the effect of a shortage of resources on poor engagement was mediated by burnout (Hakenen et al., 2006; Simpson, 2009).

Although these were the findings, it was found that by using the JD-R model, burnout only partially mediates the effect of job demands on organizational commitment and that the effect of job resources on organizational commitment is also only partially mediated by work engagement (Llorens, Bakker, Schaufeli & Salanova, 2006).

Similar findings were recorded by Richardsen, Burke and Marthinussen (2006) when they focussed on work and health outcomes among police officers. They focussed on the mediating role of police cynicism and engagement and found that the effects of: individual characteristics, job demands, and job resources were partially mediated on by organizational commitment and self-efficacy (Richardsen, Burke & Marthinussen, (2006).

Burnout was researched in four different studies in 2006. The studies covered a wide range of models to understand burnout and on what it impacted and what impacted on it. Laschinger and Leiter (2006) tested a theoretical model that looked at professional nursing work environments and they linked conditions for practice to

burnout/engagement and reports of adverse events (Laschinger & Leiter, 2006). Burnout was found to partially mediate the relationship between work life factors and adverse events and that higher engagement and ultimately safer care is a result of a work environment with higher support and professional practice (Laschinger et. al., 2006). A model that linked professional practice, environment qualities and patient events resulted in a better understanding of the fundamental role of nursing leadership in the quality of work life. When nursing leadership was involved in policies, the level of staffing and the relationships between physicians and nurses, and the impact on the quality of work life was observed. They also found that a direct path could be found between staffing and emotional exhaustion as well as from the nursing model of care to personal accomplishment (Laschinger et. al., 2006).

In 2006 Cho, Laschinger and Wong (2006), tested the link between the perceptions of structural empowerment and six areas of work life to work engagement/burnout and organizational commitment in a model. A direct negative effect from emotional exhaustion was found on commitment. They did, however, find that there is a direct link between: a) structural empowerment; b) emotional exhaustion; and c) areas of work life (Cho, Laschinger & Wong, 2006). The concept of work engagement is described as a state of well-being, which is characterised by high levels of energy that are invested in work. The concept also refers to:

- a) involvement;
- b) being dedicated;
- c) enthusiasm; and
- d) being inspired by one's work.

It then became necessary to empirically test if work engagement can be separated from job involvement and organizational commitment. Hallberg and Schaufeli set out to establish this - also in 2006. Previously in 1997 Meyer and Allen had found that organizational commitment is a function of the situation which differed to Lawler and Hall's findings in 1970 (as cited in Hallberg & Schaufeli, 2006) that job involvement is a function of the individual. Hallberg and Schaufeli, however, found that work engagement, job involvement and organizational commitment are three distinct constructs (Hallberg & Schaufeli, 2006). This was an important finding in directing future research to focus on these constructs separately. This is also important for job satisfaction and work engagement. However, some researchers argue that job satisfaction is an outcome of work engagement while others believe job satisfaction is an antecedent of work engagement (Rayton & Yalabik, 2014; Saks, 2006).

The effects of Type A behaviour on work situations were studied in 2007 with the aim of getting a better understanding of its association with burnout and engagement. Only 13% common variance was found between Type A behaviour and work engagement. Further, no significant interactions could be found between Type A behaviour and autonomy or work load (Simpson, 2009). This was followed up by work on the relationship between a) work engagement, b) job resources, and c) job demands. From the three characteristics of work engagement, vigour and dedication were experienced frequently among the participants. Therefore, the experience of work engagement was stable and the frequency did not change in the two-year period of the study. Job resources were found to be a better indicator of work engagement but job demands, organisation-based self-esteem and job control proved to be the most delayed predictors of the three work engagement dimensions. The only statistically significant positive effect was that of job control on dedication (Mauno, Kinnunen & Ruokolainen, 2007). The role of three personal resources . a) self-efficacy; b) organizational based self-esteem; and c) optimism - as part of the JD-R model was examined to get an understanding of its mediating effect on the relationship between job resources and work engagement. They also explored if personal resources moderated the relationship between job demands and exhaustion as well as how personal resources relate to how employees perceive their well-being and work environment (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). It was found that:

- Firstly, personal resources influenced the perception of job resources.
- Further, it indicated that personal resources did not offset the relationship between job demands and exhaustion.
- Lastly, it indicated that personal resources mediated the relationship between job resources and engagement (Xanthopoulou et al., 2007).

The positive effect between job resources and work engagement was built on in 2008 when the interrelationship between a) job resources, b) work engagement, c) personal initiative and d) work-unit innovativeness was examined. It was found that there are individual gain spirals and that:

- Job resources at task level predicted work engagement and work engagement predicted personal initiative.
- Personal initiative had a positive influence on work engagement and work engagement had a positive influence on future job resources.
- It was further found that perceptions of the innovativeness of the work unit was predicted by personal initiative suggesting that individual resources at work can

transmit to the wider context of the work-unit (Hakenen, Perhoniemi & Toppinen-Tanner, 2008).

This highlighted the importance of personal resources (e.g. hope, resilience, self-efficacy and meaning-making). By using the JD-R model, human resources management in an organisation can determine the areas of concern whether they are a) individuals, b) teams, c) job positions or d) departments that score low on work engagement or its antecedents. They can then put interventions in place that can assist both the individual and the organisation (Bakker & Demerouti, 2008). A need was expressed that research designs should be elaborated on to enable tests to assess causality more rigorously where predictors and outcomes on work engagement are objectively measured (Bakker & Demerouti, 2008). To improve work engagement, certain workplace behavioural health practices can be adopted that address job design, supervisory communication, resource support, corporate culture, working conditions and leadership style (Attridge, 2009).

Theory was developed to position engagement as a key mechanism to explain the relationship between a variety of individual characteristics, organizational factors and job performance. The study found that engagement was directly responsible for the relationships between the antecedents and the performance outcomes (Rich, Lepine & Crawford, 2010; Schuck, Reio Jr & Rocco, 2011). The nature of the behavioural contributions made by employees to their organisations was a function of their job engagement. Rich et al. (2011), believed that their research provided more insight into the work on job engagement. It was done using Kahn's suggestion in 1990 (that engagement is rooted in the three psychological conditions meaningfulness, safety and availability and that perception of self and of the context of work cause these psychological conditions) as a framework with three antecedents of engagement (Rich et al., 2010). The three antecedents that were considered included a) value congruence, b) perceived organizational support, and c) core self-evaluations. This was the first study that linked this particular set of antecedents to Kahn's engagement construct. A unique effect was observed on engagement by each of the antecedents in that each predicted job satisfaction. However, the effect of perceived organizational support is stronger than those of core self-evaluations and value congruence. Value congruence and perceived organizational support were the only two that predicted job involvement (Rich et al., 2010).

Although engaged employees have the ability to craft their jobs, questions were asked about certain risks or downsides of engagement. These questions included the following:

- Firstly, how one should conceptualise engagement (Bakker, Albrecht & Leiter, 2011). It was believed that no industry-wide agreement existed because there was no agreement on the meaning of work engagement although there was a broad consensus on two core dimensions of work engagement energy and involvement/identification.
- Another question was how to measure engagement as three different scales were used including UWES - Utrecht Work Engagement Scale; OLBI - Oldenburg Burnout Inventory; and MBI-GS - Maslach Burnout Inventory-General Survey (MBI-G). This question was related to the way in which the responses should be framed.
- Thirdly, were the questions related to the fluctuations of engagement over a workweek? What was the climate for engagement? Can leaders influence follower engagement? Is engagement contagious? Do engaged employees conserve their own work engagement? Is there a dark side of engagement? Is engagement related to health?
- Lastly, what are effective interventions for engagement?

All the above questions were asked to ensure alignment in the industry in order to build on each other rather than to ask the same questions and to find different answers without making progress (Bakker et al., 2011).

These enquiries emphasise the vast number of research opportunities in the field of study in relation to engagement and its four themes (Bakker et al., 2011). Commentary was received on the questions raised in the article by Bakker, Albrecht and Leiter and they responded by confirming that they agreed that future research should look at the impact of moderators on work engagement (Bakker et al., 2011). One of the commentaries received was by Sabine Sonnentag who believed that it is important to distinguish between work engagement and burnout measures and that vigour, dedication and absorption should be related to other engagement concepts (Sonnentag, 2011).

One of the untouched areas was the concept of new ways of working. This was challenged by studies that sought to understand if work engagement was fostered by new ways of working and if it had any influence on exhaustion. Certainly, electronic communication has enabled new ways of working as this has allowed employees to work when and where they wanted to. However, it was found that the increased effective and efficient communication produced a negative relationship between exhaustion and engagement, although a positive relationship was found between engagement and new ways of working (Ten Brummelhuis, Bakker, Hetland & Keulemans, 2012). While it is

important to know how to ensure work engagement by understanding the best configuration of a job, it is just as important to understand how to ensure engaged employees stay engaged. According to (Bakker et al., 2012) these three factors for engagement are:

- Engaged employees need an amount of control/autonomy to craft their own jobs in order to stay engaged and challenge themselves.
- Engaged employees behave in a proactive manner to reach high performance standards which ensures that they stay engaged.
- An engaged employee does not rely only on management to get to his/her ideal job. They have the ability and will to challenge themselves to initiate the change themselves.

After the question with regard to measurement of work engagement and burnout was raised by Bakker et al. (2011), research was done to examine the current measurement models against alternatives. The research was done across countries to further enhance the study. Both samples showed the superiority of the proposed three-factor structure for both UWES (e.g. vigour, dedication, and absorption) and MBI-GS (e.g. exhaustion, cynicism, and reduced professional efficacy). The alternative two- and one-factor models could not show a better fit for the data. The findings proposed that UWES and MBI-GS are valid instruments for testing engagement and burnout and also allow for comparisons across countries (Xanthopoulou, et al., 2012). The UWES scale was also tested to examine if it could be used in circumstances of between person (trait) and in person (state). The findings supported the fact that the UWES scale can be used to measure both the trait and state of work engagement on a daily basis (Breevaart, et al., 2012).

The role of psychosocial safety climate (PSC) in schools for teachers was examined to understand its impact on the relationships between job demands and engagement as well as job demands and fatigue. The PSC had a positive effect on the relationship between recovery and fatigue as well as on the relationship between recovery and engagement. The findings confirmed that PSC could act as a buffer against daily job demands. Higher levels of PSC were found to be able to increase the benefits to schools with regard to improved daily recovery (Garrick et al., 2014).

This research was followed up by examining the internal relations that exist between the morning recovery level and work engagement through the day and between work engagement through the day and subsequent recovery at the end of the day. It was found that job demands did not reduce the level of recovery whereas situational

constraints did. Therefore situational constraints interrupted the ongoing process in the relationships examined (Sonnentag et al., 2012).

Another important aspect examined for its impact on work engagement is that of off-job activities and the recovery that is needed to return to work with enthusiasm and vigour - if it does have an impact at all. It was found that leisure activities that included social, low-effort, physical activities had a positive effect and increased vigour the next morning mainly because it increased detachment and relaxation. Vigour was reduced by high duty off-job activities like work and household tasks because these activities reduced psychological detachment and relaxation (Ten Brummelhuis & Bakker, 2012).

While situational constraints reduced the reciprocal relationship between recovery and work engagement, research has also been done to examine the role of a proactive personality on predicting work engagement and job performance. If employees are able to craft their own jobs by increasing their challenges and by increasing their structural and social job resources they would be able to stay engaged and perform well. The fact that findings supported this confirmed that proactive personalities performed well because they are able to work with vigour and dedication while they are absorbed in their work (Bakker, Tims & Derks, 2012).

Other research has shown that resource loss and situational constraints have an adverse effect on work engagement (Rayton & Yalabik, 2014). The effect that resource loss has (through PCB) on work engagement has been examined by including job satisfaction as a mediator on the relationship between PCB and work engagement. Rayton & Yalabik's 2014 study was the first to examine the impact of feelings in the form of resource loss (PCB) on work engagement. It was found that work engagement was more likely to occur if employees were satisfied in their jobs. The findings further supported the notion that employees offer work engagement to the organisation in return for receiving perceived organizational obligations (Rayton & Yalabik, 2014).

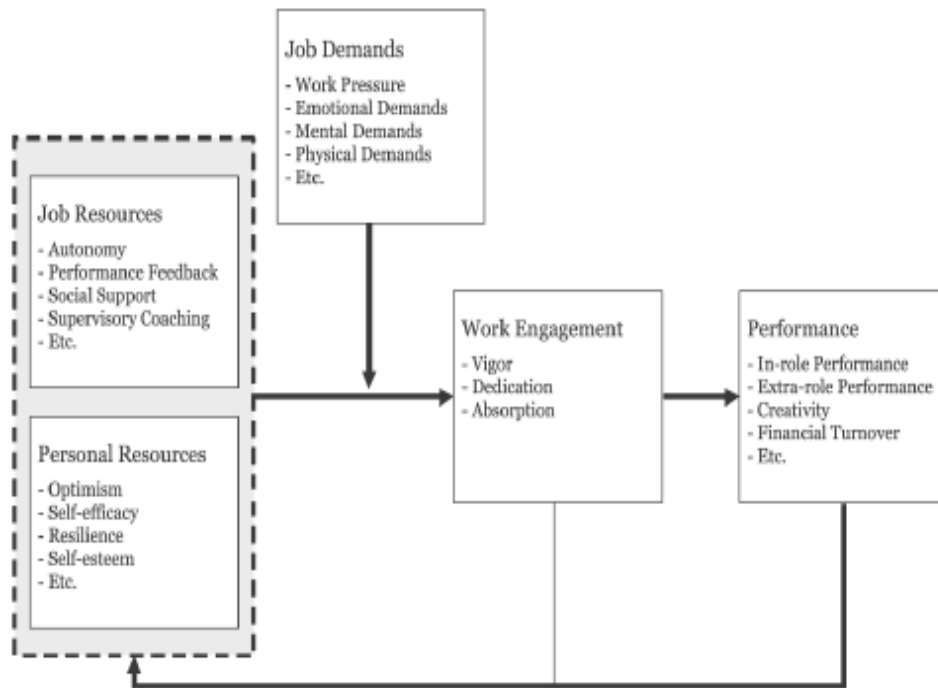
2.2.2 Antecedents and drivers of work engagement

Antecedent conditions have been a large focus area of researchers to align managerial efforts that improve engagement levels within the workplace (Crawford, LePine & Rich, 2010). The JD-R model is used in various studies and is proven to be reliable to determine the effect of antecedents on work engagement and ultimately performance (Bakker & Demerouti, 2007). As found by Bakker & Demerouti, 2007 (as cited in Botha & Mostert, 2014) the model can be applied in various occupational industries irrespective

of the particular resources and demands involved. Two general categories are identified by the JD-R model that categorise the risk factors associated with job stress; a) job resources (i.e. the physical, psychological, social or organizational aspects of an individual's job that decrease the job demands and the physiological and psychological costs associated with it); and b) job demands (i.e. the physical, psychological, social and organizational aspect of a job that require sustained physical or psychological - cognitive and emotional - efforts). Regardless of the particular resources and demands involved, these can be applied to various situations (Bakker & Demerouti, 2007; Botha & Mostert, 2014). It is assumed by the JD-R model that limited job resources and high job demand result in the development of job strain. Work engagement is most likely when job resources are high and job demands are high (Bakker & Demerouti, 2007).

The model was improved by Bakker and Demerouti (2008) (see Figure 1 below) to explain the antecedents and consequences of work engagement in the context where it was predicted: that personal resources and job resources combined or independently predict work engagement (Bakker & Demerouti, 2008). It was found that high job demands with increased personal and job resources result in a positive influence on work engagement, which will translate into a positive impact on job performance (Bakker & Demerouti, 2008). Employees who are engaged and perform well have the ability to create their own resources through job crafting which translates into engagement over time, which then creates a spiral of positive gain (Bakker, 2011).

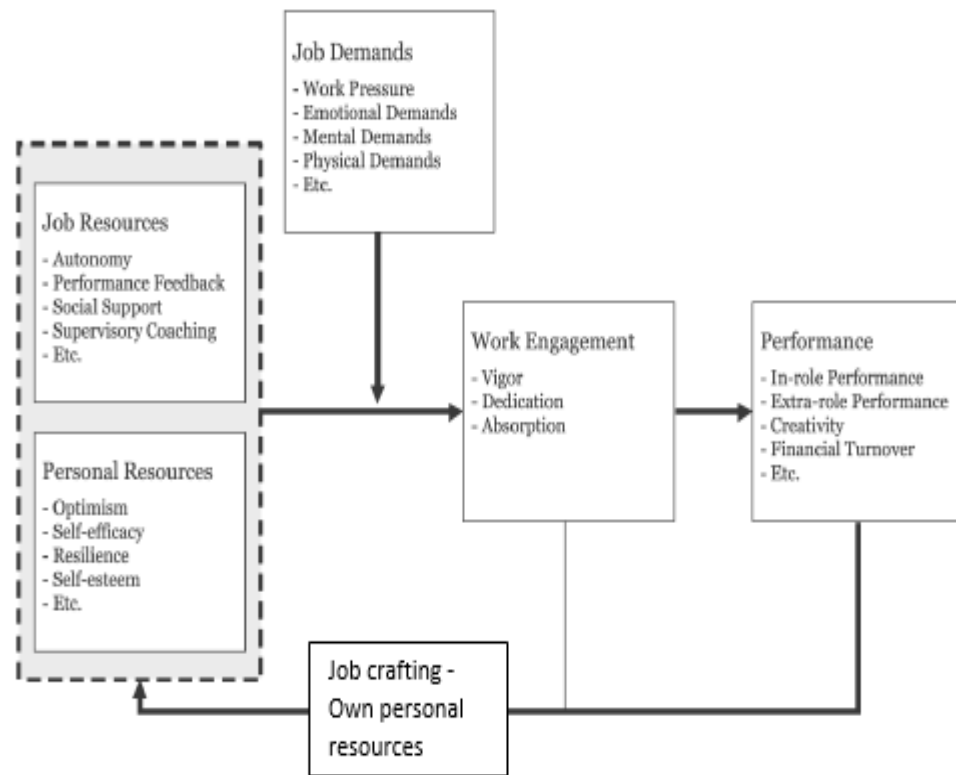
Figure 1: The J D-R Model of work engagement (Bakker & Demerouti, 2008, p. 218).



The Figure 1 above indicates that job resources and personal resources predict work engagement collectively or independently. It also shows how work engagement translates into performance especially when job demands are high. Therefore it highlights the importance of resources with regard to improved work engagement and ultimately to improved job performance and organizational performance. The feedback loop emphasises the positive effect that can develop where performance drives resources which, in turn, predict work engagement which further support performance.

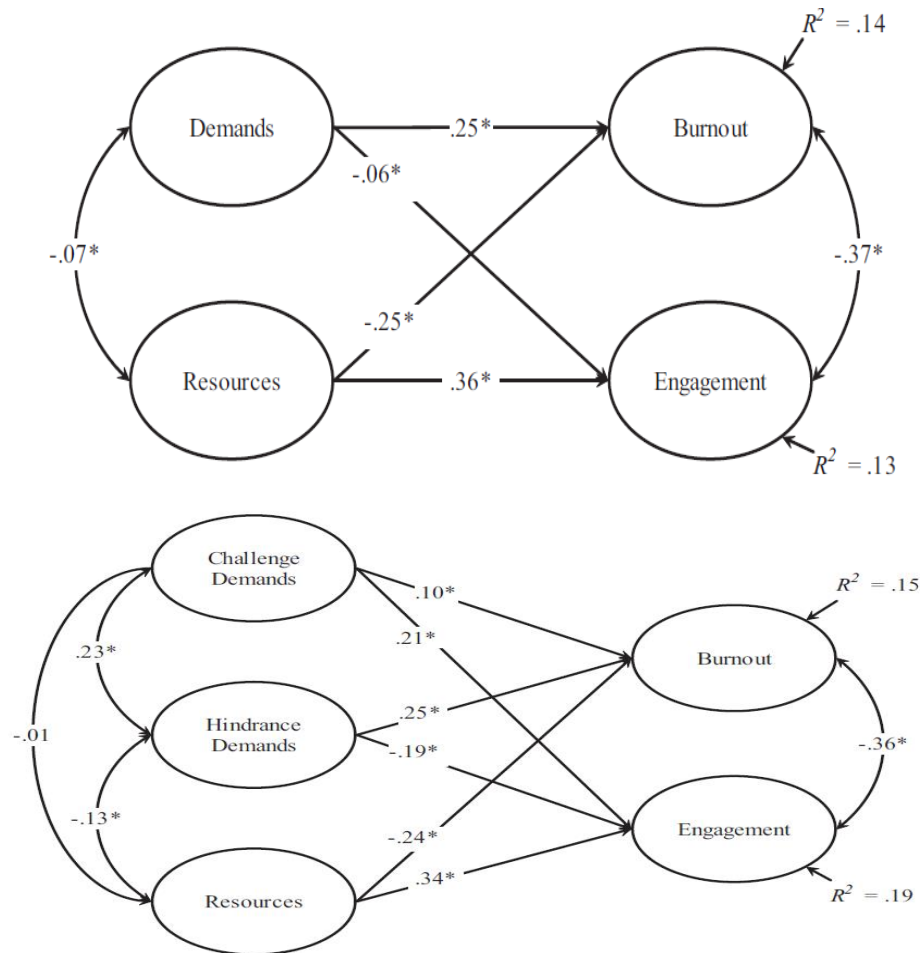
The figure below (Figure 2) includes job crafting and suggests that within the JD-R model individuals have the ability to increase resources by crafting their jobs. This, in turn, creates a positive gain spiral. It is for this reason that work engagement is important for organisations because it creates a spiral of positive effects that contribute ultimately to better performance (Bakker & Demerouti, 2007).

Figure 2: The JD-R model of work engagement adjusted to include job crafting which fosters a positive gain spiral+(Bakker, 2011, p. 267)



Research on the JD-R model has produced inconsistent and conflicting findings with regard to the relationship between job demands and work engagement. Although the JD-R model predicts that burnout is caused by job demands, it was unclear as to what the relationship between job demands and engagement was (Crawford et al., 2010). Meaningful relationships between demands and engagement emerged when a distinction was made between the different types of demands and how employees appraise those (Crawford et al., 2010). It was proposed that job demands perceived by employees as challenges (e.g. job responsibility, time urgency, and workload) are positively related to engagement and job demands perceived by employees as hindrances (e.g. administrative problems, emotional conflict, organizational conflict, resource inadequacies, role conflict and role overload) are negatively related to engagement. These relationships appeared to be consistent when they were empirically tested as shown in Figure 3 below.

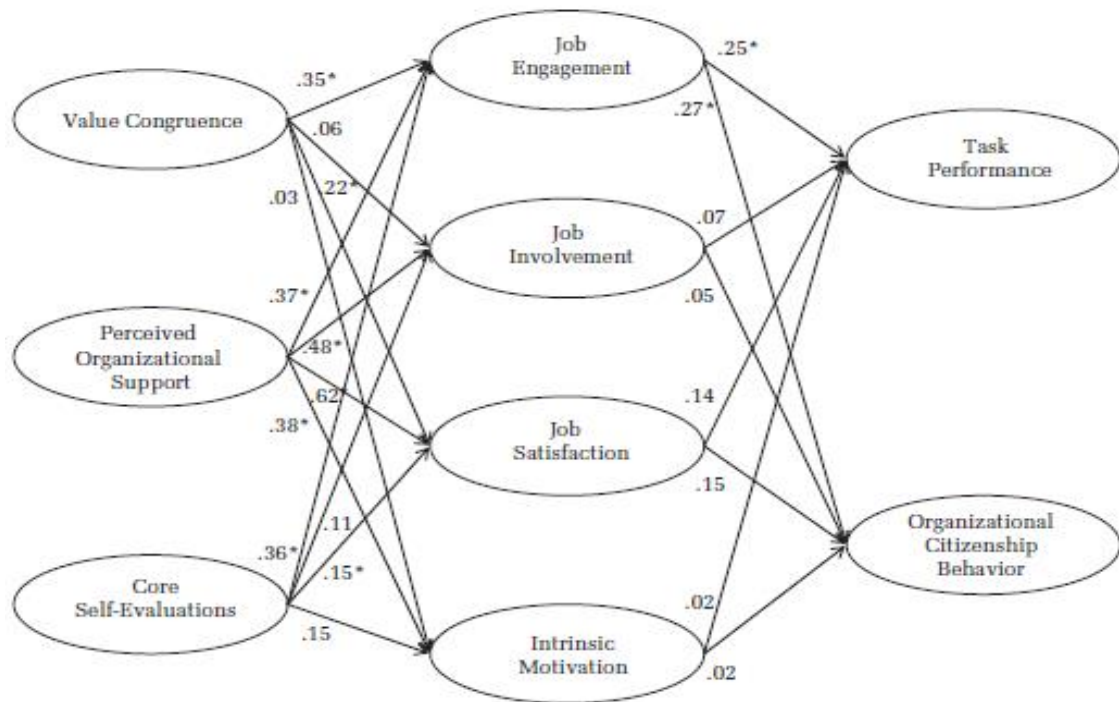
Figure 3: Summary of the meta-analytic path analysis of the conventional and differentiated job demands resource model (Crawford et al., 2010, p. 841)



The first outline above in Figure 3 illustrates the initial analysis without filtering job demands. It can be seen that there is a positive (0.25) relationship between job demands and burnout and a negative (-0.06) relationship with engagement (Crawford et al., 2010). In the lower outline of Figure 3, the job demands have been split into challenge demands and hindrance demands and it can be seen that the challenge demands have a positive relationship with burnout (0.10) and engagement (0.21). The hindrance demands after the split has a positive relationship with burnout (0.25) and a negative relationship with engagement (-1.90) (Crawford et al., 2010). By splitting job demands it is clearly illustrated that challenge demands enhance engagement and hindrance demands reduce engagement. Therefore challenge demands and job resources foster work engagement, Job resources have been shown to have a positive relationship with engagement as can be seen in both figures above.

In the figure below (Figure 4) perceived organizational support (e.g. trustworthy, secure, predictable, fairness, supervisor support, organizational rewards, favourable job conditions) as part of job resources indicate the positive relationship that it has with job engagement (0.37) and job satisfaction (0.62) (Rich, Lepine & Crawford, 2010; Rhoades & Eisenberger, 2002). It also shows the positive relationship that exists between job engagement and task performance (0.25) and job satisfaction and task performance (.14) (Rich et al., 2010).

Figure 4: %Structural model with engagement and other affective motivational states+(Rich et al., 2010, p. 627)



These findings indicate that:

- Job demands and job resources, including organizational support, are significantly associated with job engagement (0.37) and job satisfaction (0.62).
- Job engagement (.25) and job satisfaction (.14) are significantly associated with task performance.

This confirms the impact that organizational support has on task performance (Rich et al., 2010).

2.2.3 Outcomes of work engagement

Over a period of 20 years human resource management has been impacted by high organizational commitment from employees (Scrima et al., 2014). Engaged employees have a sense of energy and an effective connection with their work activities. They view themselves as able to deal well with the ongoing demands of their jobs+(Schaufeli et al., 2006, p.700). Work engagement has been defined as a positive, fulfilling work-related state of mind that is characterised by vigour, dedication, and absorption (Schaufeli et al., 2006; Schaufeli et al, 2002).

- Vigour, in the motivational model, speaks to the ability of the individual to display high levels of energy and mental resilience while working, it also underlines the willingness to invest effort in one's work, and be persistent even in the face of difficulties+(Schaufeli et al., 2006, p.702).
- Dedication refers to an individual who is strongly involved in their work and someone who is experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge+(Schaufeli et al., 2006, p702).
- Absorption is described as being fully focused and happily engrossed in one's work, where time passes too quickly and one has difficulty detaching oneself from the work+(Schaufeli et al., 2006, p.702).

From previous research done it has been proposed that engaged employees seem to be different from other employees in so far as their personal resources that include:

- optimism
- self-efficacy
- self-esteem
- resilience
- an active coping style.

These resources that they have seem to help workers that are engaged to control their work and have a successful impact on their work environment (Scrima et al., 2014). In addition, there are multiple levels of influences such as a) individual, b) interpersonal, c) group, d) intergroup, and e) organizational that shape people's personal engagements and disengagements. When paying particular attention to work engagement it translates into benefits for the worker and offers companies a competitive advantage (Scrima et al., 2014).

The consequences, as a result of work engagement, include:

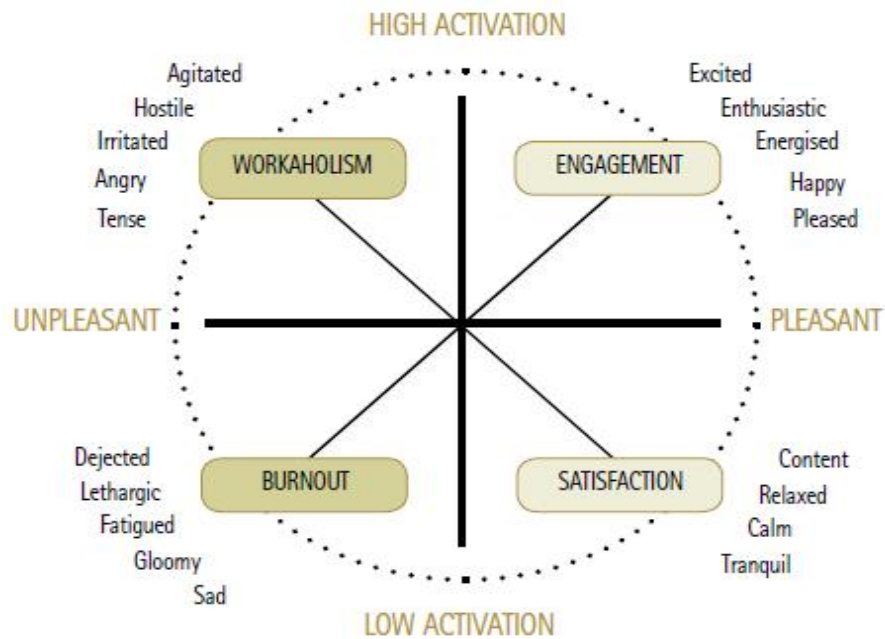
- organizational commitment
- personal initiative
- low turnover of staff
- low sickness absence
- job/task performance
- service quality
- innovativeness
- business unit performance (Blackwell, 2014; Rayton & Yalabik, 2014).

Moreover, Bakker, Demerouti and Verbeke in 2004 have added to the above outcomes by including ~~organizational citizenship behaviour~~ and ~~customer satisfaction~~ (as cited in Ten Brummelhuis & Bakker, 2012). The Gallup research report highlights outcomes that are strongly connected to work engagement for organisations such as a) productivity, b) profitability, and c) customer satisfaction that are essential to an organisation's financial success by driving innovation growth and revenue (Gallup, 2013). Outcomes have been further identified as follows:

- Individuals tend to be proactive when they are engaged in their work and do not wait for their managers to tell them what to do, thus increasing productivity and performance for the organisation (Sonnentag et al., 2012).
- Moreover, when individuals are able to craft their jobs because they are proactive, the result is that they can increase their social and structural job resources that increase their job challenges and this, in turn, increases their work engagement (Bakker, Tims & Derks, 2012).
- Furthermore, engaged employees with autonomy to impact on their work do so by being more resourceful and by increasing the challenges it offers (Bakker, Demerouti, & Xanthopoulou, 2012).
- Other outcomes for individuals include pay, opportunities to learn and to experience meaningful work (Bakker et al., 2011)

The figure below (Figure 5) indicates the outcomes for the individual related to the level of activation and the pleasantness of their experience. For engagement this includes excited, enthusiastic, energised, happy and pleased states impacting on well-being (Bakker et al., 2012).

Figure 5: A two-dimensional view of work-related subjective well-being (Bakker et al., 2012, p.16)



2.3 Job satisfaction

Job satisfaction was described by Hoppock in 1935 as any combination of psychological, psychological and environmental circumstances that result in a person truthfully saying he is satisfied in his work (as cited in Aziri, 2011). Job satisfaction is the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values. Job dissatisfaction is the unpleasant emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values or as entailing disvalues. Job satisfaction and dissatisfaction are a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing+ (Locke, 1969, p.316). According to Spector job satisfaction has to do with the way people feel about the various aspects of their job (as cited in Aziri, 2011). Job satisfaction is a combination of both what an employee feels (affect) about his/her job and what he/she thinks (cognition) about the various aspects of his/her job+ (Rayton & Yalabik, 2014, p.2386). Satisfaction, dissatisfaction and other emotional reactions are value responses. They are the form in which an individual experiences his appraisal of an object or situation against the standard of what he considers good or beneficial (Locke, 1970)

In line with these definitions, job satisfaction might be handled as the consequence that results from the comparison between the expectations of the employee from his job and the job in question which is performed. The consequence may emerge as satisfaction or dissatisfaction of the employee from the job+ (Adenike, 2011, p. 153-154).

When the employee sees that his expectations are not met in the job environment, job dissatisfaction emerges. It leads to the decrease in workforce productivity, organizational commitment and commitment to the job and an increase in the rates of the optional discontinuation of the job+ (Adenike, 2011, p.154). There is a positive relationship between job satisfaction and organizational commitment which implies that the level of commitment increases as job satisfaction increases (Mohammed & Eleswed, 2013). Locke stated that satisfaction should be regarded primarily as a product of performance (as an outcome of action as appraised by the individual) and only very indirectly as a determinant of performance (Locke, 1970).

Job security is recognised as a very important and highly valued attribute to a worker. In times of economic contraction, for instance, job security increases worker job satisfaction more than in times of economic expansion as job losses are feared more when job openings are fewer (Artz and Kaya, 2014). Not only have these researchers shown that

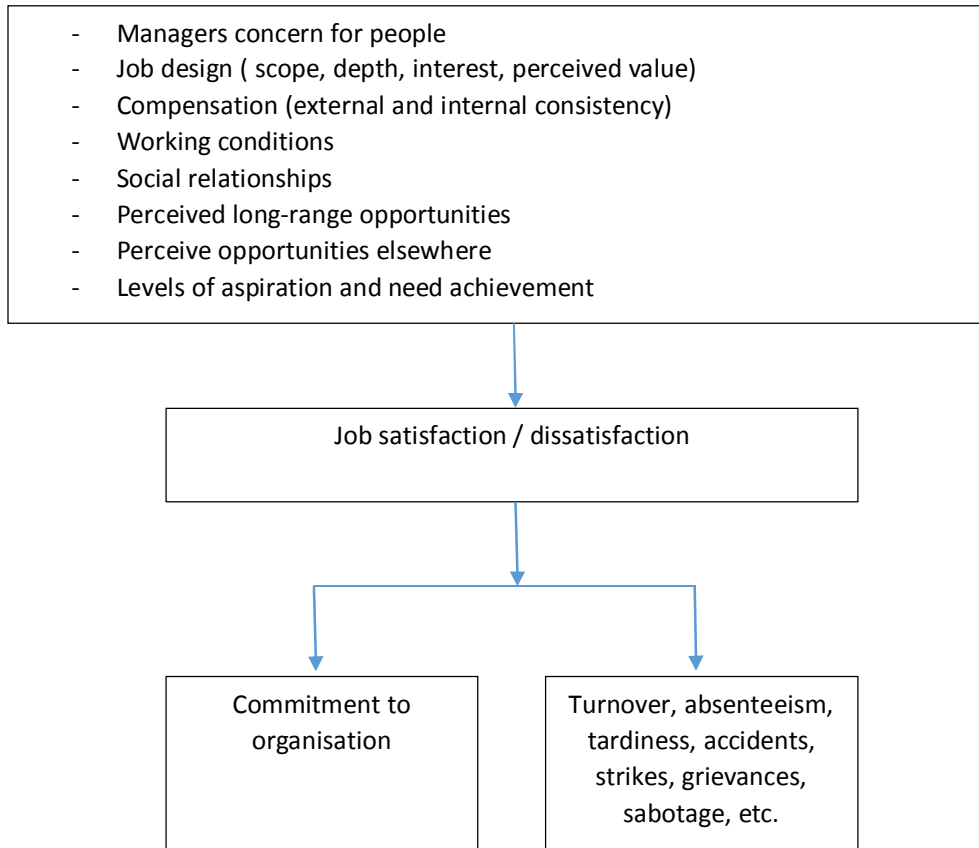
job security increases job satisfaction in times of economic contractions, but also that job satisfaction has been linked to increased employee productivity as well as reduced employee absenteeism and propensity to quit, it is suspected that it is in the interests of employers that workers secure in their jobs may be more productive in recessionary times (Artz & Kaya, 2014).

According to Rue and Byaes (2003) (as cited in Aziri, 2011) the factors that have an influence on job satisfaction include:

- organizational support (managers concern for people)
- job design
- compensation
- working conditions
- social relationships
- perceived long-range opportunities
- perceived opportunities elsewhere
- levels of aspiration
- need for achievement+(Aziri, 2011, p. 81)

Job satisfaction plays a critical role since it affects the behaviour of employees, which in turn, have an influence on the performance and functioning in the organisation (Rowden, 2002). Other studies argue that job satisfaction is a predictor of work engagement and organizational citizenship behaviour (Salanova, Llorens & Schaufeli, 2011 as cited in Rayton and Yalabik, 2014; Simpson 2009; Swaminathan & Jawahar, 2013).+They expected that the employees who are satisfied with their jobs become engaged in their work for several reasons+(Rayton & Yalabik, 2014, p.2386). Factors influencing the level of satisfaction or dissatisfaction experienced by the individual are listed in Figure 6 below.

Figure 6: Four determinants of satisfaction and dissatisfaction by Rue and Byaes 2003+(as cited in Aziri, 2011, p. 79)



These factors can further be divided into motivational and hygiene factors as proposed by Herzberg in 1976 (as cited in Aziri, 2011). He believed that motivational factors can cause satisfaction or no satisfaction when they are absent. Whereas hygiene factors, when they are present, cause satisfaction and when they are absent cause dissatisfaction (Aziri, 2011).

Figure 7: Hygiene and motivational factors as per Herzberg in 1976+(as cited in Aziri, 2011, p.80)

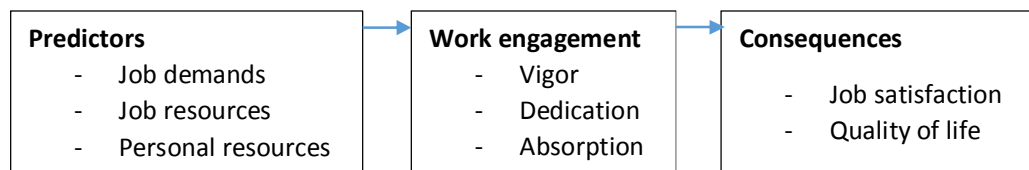
Hygiene Factors	Motivators
Company policies	Achievement
Supervision	Recognition
Interpersonal relations	Work itself
Work conditions	Responsibility
Salary	Advancement
Status	Growth
Job security	

The view of job satisfaction as an antecedent of work engagement is supported by Social Exchange Theory (Rayton & Yalabik, 2014). A positive emotional and cognitive evaluation of their jobs is expected to push employees into being engaged with their jobs as reciprocation for the job satisfaction enabled by the organisation+(Rayton & Yalabik, 2014, p.2386-2387). Once the needs are fulfilled (i.e. the employees are satisfied with their jobs) employees are expected to become engaged with their work+ (Rayton & Yalabik, 2014, p.2387). It was also found in a study done on older experienced employees that job satisfaction was greater when organisations provided training opportunities for them (Leppel, Brucker & Cochran, 2012).

Pomirleanu and Mariadoss (2015) have explored the impact of organizational and functional support on the development of salesperson job satisfaction. Their findings indicate that higher levels of organizational support positively relate to higher levels of trust by the employee in both the supervisor and organisation. They found that, building on the social exchange theory, trust mediates the relationship between organizational support and job satisfaction (Pomirleanu & Mariadoss, 2015).

The impact of PCB on the turnover intention and job satisfaction has been researched by Ahmed and Khan (2015). Their findings show that employees are happy to work for an organisation while there are no other job opportunities. They suggest that if this is not the case they believe that job satisfaction will be influenced by PCB (Ahmad & Khan, 2015). Other researchers have found that there is a positive correlation between job satisfaction and job performance (Petty, McGee & Cavender, 1984) (see Figure 8 below). Some researchers have also found that there is a positive correlation between job satisfaction and motivation, and the correlation is stronger with older, more experienced employees (Van Scheers & Botha, 2014). Other researchers in the literature have found that job satisfaction is a consequence of work engagement (Mache, Vitzhum, Klapp & Danzer, 2014).

Figure 8: A model of predictors and outcomes of work engagement+(Mache et al., 2014, p. 184)



Research that was done in 1971 on job satisfaction focussed on job satisfaction as a predictor of job success (Betz, 1971). The literature confirmed this but no cross-validation was done. This study tested the relationship between job satisfaction as a predictor of work engagement as the interest of this present researcher was to see whether job satisfaction had a moderating effect on the relationship between PCB and work engagement. Some of the most recent work done on job satisfaction as a moderator includes work done by Wulandri, Mangundjaya and Utoyo in 2015, who researched whether job satisfaction is a moderator or a mediator on the relationship between change leadership and commitment to change. This has confirmed the ongoing debate to better understand job satisfaction and the role that it plays in complex relationships (Wulandri, Mangundjaya & Utoyo, 2015).

2.4 Organizational support

The JD-R model is also used to explain the impact that job resources has on the work engagement levels of employees (Bakker & Demerouti, 2007). Job-related stress is caused by the specific risk factors related to every occupation. These factors can be divided into job demands and job resources. Job demands increase the stress levels and job resources decrease the stress levels. Job resources are the a) psychological, b) physical, c) organizational, or d) social aspects that decrease the job demands of an individual's job. Therefore a job resource will support an individual with regard to achieving their goals and encourage a) learning, b) personal growth and c) development (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004).

Employees develop global beliefs concerning the extent to which their organisation values their contributions and cares about their well-being. This is known as perceived organizational support (POS) (Eisenberger, Huntington, Hutchison & Sowa, 1986, p. 500). Such perceived organizational support reduces absenteeism and is assumed to increase the employees' affective attachment to the organisation with the expectancy that greater work effort will be rewarded (Botha & Mostert, 2014; Eisenberger et al., 1986). These beliefs are formed to support the employees' need for praise and approval as well to confirm the organisation's readiness to reward efforts that support organizational goals (Eisenberger et al., 1986). Employees reciprocate perceived organizational support by altering their efforts to meet organizational goals (Eisenberger et al., 1986, p.506).

Employees' general perceptions of being valued and cared about by the organisation is positively related to a) conscientiousness in carrying out conventional job

responsibilities, b) expressed affective and calculative involvements in the organization, and c) innovation on behalf of the organisation in the absence of anticipated direct reward or personal recognition+ (Eisenberger, Fosolo & Davis-Lemastro, 1990, p.51)

Research has identified a variety of rewards and favourable working conditions that are positively related to POS, such as:

- developmental experiences allowing employees to expand their skills (Wayne, Shore & Liden, 1997 as cited in Aselage & Eisenberger, 2003);
- the quality of the training they are offered (Leppel et al., 2012);
- autonomy in the manner in which jobs are carried out (Eisenberger, Rhoades & Cameron, 1999 as cited in Aselage & Eisenberger, 2003); and
- visibility to and recognition from upper-level management (Wayne, Shore, Bommer & Tetrick, 2002 cited in Aselage & Eisenberger, 2003).

Research found that employees hold organisations partly responsible for abusive supervision which is associated with lower levels of organizational support. This translates into higher levels of counter-productive work performance. This then emphasises the importance of reducing abusive supervision and to design promotion structures to prevent the placement of authoritarian individuals as supervisors (Schoss, Eisenberger, Restubog & Zagenczyk, 2013).

Open communication between management and employees is an effective way to increase employees' performance both their standard job and extra-role activities - mainly because it signals that the organisation cares about the well-being and values the contributions of its employees (Neves & Eisenberger, 2012). This was further supported by work done to determine the effect that organizational support has on work engagement. It was found to have a direct effect on work engagement. The more employees experience support from their organisation the more they become absorbed in their roles and jobs. This translates into doing their jobs with dedication and vigour (Caesens & Stinglhamber, 2014). It was found that employees are more willing to take risks in their jobs with innovative ideas because of higher levels of trust when POS is experienced. This is important in a global competitive environment as outcomes are uncertain, and trust, as a result of POS, encourages employees to take risks that might lead to outcomes with potentially high returns (Neves & Eisenberger, 2014).

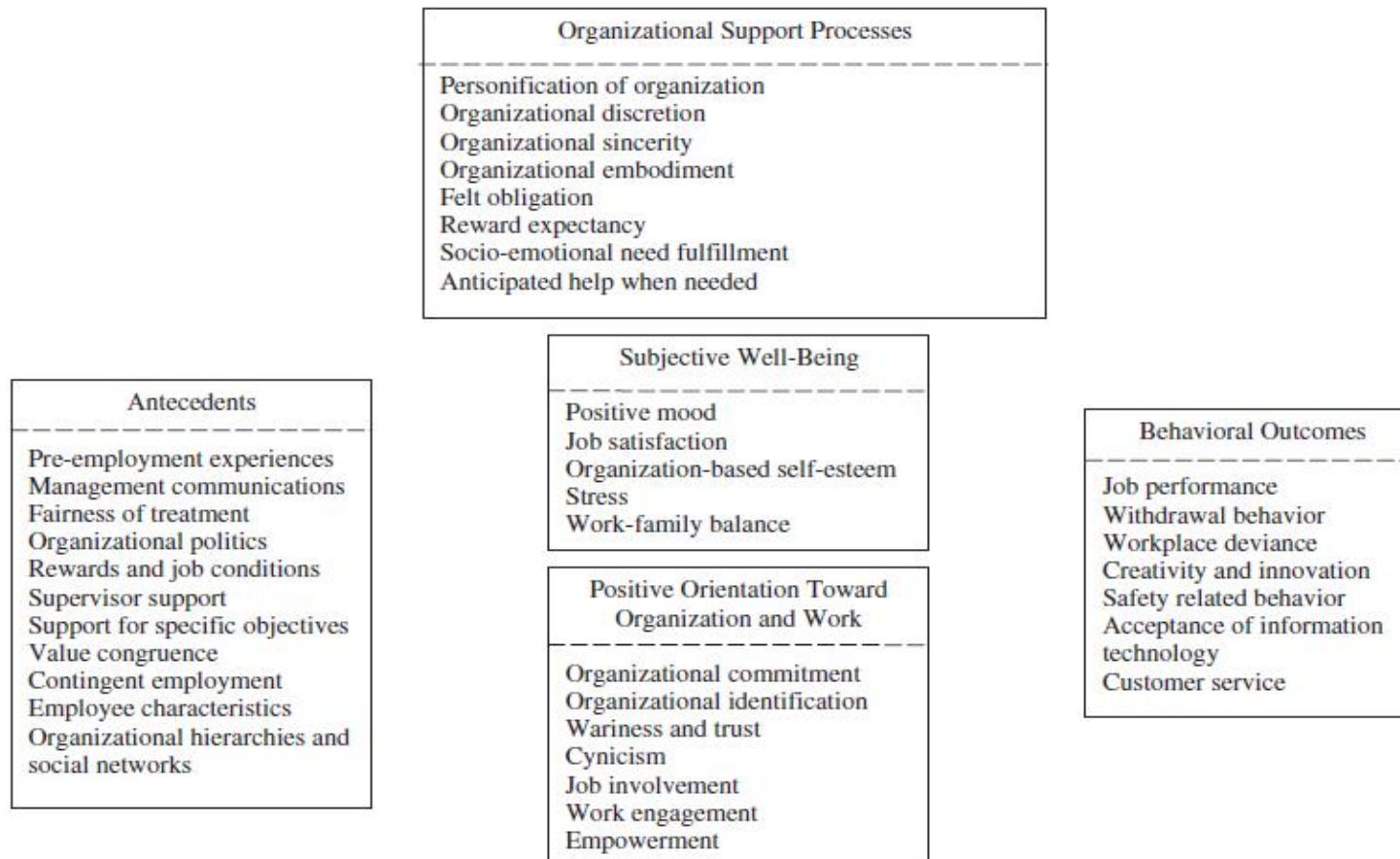
As a result of the dynamic competitive environment in which organisations find themselves globally, organizational change (including restructuring which may result in job losses and technological implementations) is common and necessary. Empirical

evidence has shown that organizational change has a negative effect on job satisfaction which leads to a decline in performance (Artz & Kaya, 2014; Aziri, 2011). If employees are unable to make sense of their environmental changes, they are likely to hold the organisation responsible that led them to believe that there is not adequate organizational support (Cullen, Edwards, Casper & Gue, 2014). The employees' ability to adapt is influenced by willingness, skill and motivation to change. It was found that employees draw on organizational support in times of change to evaluate the aid that they receive from organisations to cope with change (Cullen et al., 2014). This is then perceived by employees to be a signal as to whether organisations value and support them, which then influences job satisfaction and performance. This can be seen in the figure below (Figure 9) by Caesens and Stinglhamber (2014) where they found that organizational support has a positive effect on work engagement directly, and through mechanisms like self-efficacy, leads to higher job satisfaction and extra-role performance and with less psychological stress (Caesens & Stinglhamber, 2014).

As it is seen as a critical time, a changing environment is an opportunity for organisations to influence perceived organizational support. It is therefore important to communicate the rationale for change and only to implement changes with a clear basis for improvement. By reducing unnecessary changes the organisation will be able to give employees access to the change process through transparent, clear communication and by giving employees a greater voice. Encouragement of employees to give more input in the change process will decrease uncertainty and will improve perceptions of organizational support (Cullen et al., 2014).

A summary of the theory and findings of organizational support including its antecedents, a) subject well-being, b) positive orientation toward the organisation and work is included in Figure 9 below. This is a high-level diagram that gives oversight into the construct of organizational support theory and findings.

Figure 9: Overview of theory and findings+ (Eisenberger & Stinglhamber, 2011, p. 40)



2.5 Psychological contract breach

Contracts that exist between employees and organisations can be divided into a) implied contracts and b) psychological contracts (Rosseau, 1989).

Psychological contracts refer to the term that describes an individual's belief regarding the conditions and terms of reciprocal obligations in the exchange agreement between the individual and the organisation (Rosseau, 1989). More specifically, a psychological contract has been defined as a set of beliefs about what each party is entitled to receive, and obligated to give, in exchange for another party's contributions (Levinson, Price, Munden, Mandl, Solley, 1962 as cited in Morrison & Robinson, 1997, p.228). Past experiences as well as the context in which employees find themselves contribute to creating their own perceptions of what the organisation is owed and what the employee owes in return (Rosseau, 1989).

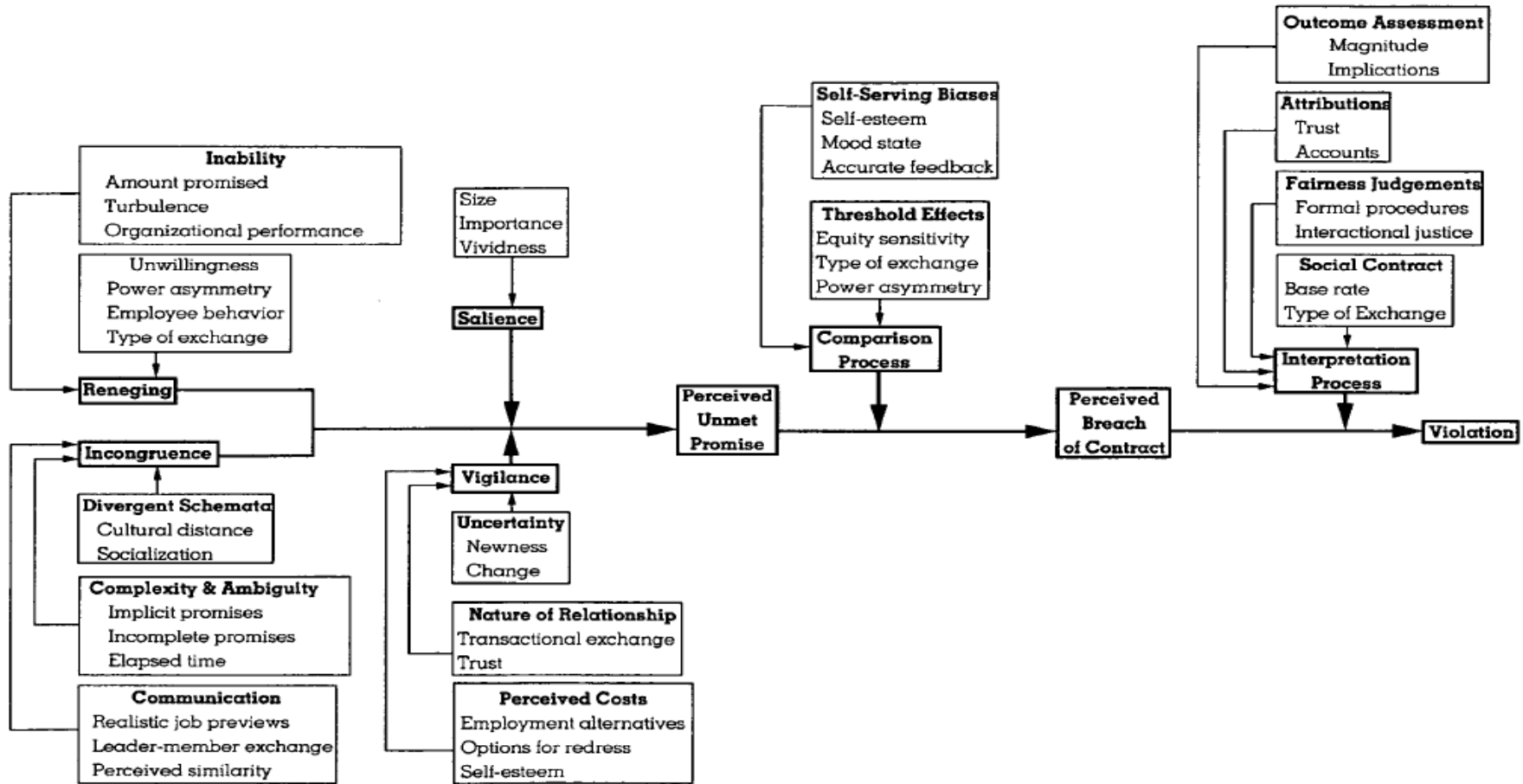
Psychological contracts are influenced by the different human resource practices imposed by organisations which can result in different types of contracts being established. These include relational, balanced, transitional and transactional contracts (Scheepers & Shuping, 2011). The failure to comply with the obligations by either party has a negative effect on the relationship between the employee and the organisation and is seen as a violation. This adversely affects the belief of the affected party with regard to the reciprocal obligations of the two parties (Robinson, Kraatz & Rousseau, 1994).

While PCB is sometimes unavoidable, the destructive reactions that often follow are not inescapable (Morrison & Robinson, 1997). It is proposed in the literature that one of the best ways to reduce psychological contract violation is through a better understanding and management of the contract-formation process (Morrison & Robinson, 1997). There are three factors said to contribute to the severity of the PCB, and these are a) attribution; b) severity; and c) time of breach (Eckerd, Hill, Boyer, Donohue & Ward, 2013).

A perceived contract breach occurs not only when an employee perceives that he or she has failed to receive something that should have been forthcoming (i.e. an unmet expectation); it also happens when the employee perceives that he/she has made contributions from their side that have not been reciprocated as promised by the organisation (Morrison & Robinson, 1997). In the psychological contract literature, numerous attributions for breach have been identified; these include a) inadvertent disruption, b) reneging and c) incongruence (Morrison & Robinson, 1997 and Rosseau as cited in Eckerd et al., 2013, p.568). Reneging is the more obvious condition that leads to a perceived breach of the psychological contract, as it involves a partner who is

perceived as being unwilling to follow through on promises+(Robinson & Morrison, 2000; Rousseau, 1995 as cited in Eckerd et al., 2013). Disruption is different to a perceived breach in that it occurs when a partner is willing but simply not able to follow through on promises made (Rousseau, 1995 as cited Eckerd et al., 2013). It was also found that PCB is experienced when, a) organisations are performing poorly; b) performance from employees is reported to be low; c) there is a lack of socialisation through a formal process; and (d) prior to their being hired, employees had little experience with the members of the organisation (Robinson & Morrison, 2000). The development of contract violation and the different inputs are displayed in the figure (Figure 10) below to give a better conceptual understanding of the process.

Figure 10: The development of psychological contract violation (Morrison & Robinson, 1997, p. 232)



Employees high in self-esteem are less likely to perceive PCB (Shih & Chuang, 2012). More traditional employees are less sensitive to PCB than less traditional employees (Chen, Tsui, & Zhong, 2008). An individual's vigilance will help determine whether an event is cognitively identified as a breach of the psychological contract, as well as whether an individual should respond to the breach. (Eckerd et al., 2013, p.568). Psychological contract breach and violation are two conceptually distinct constructs, wherein breach relates to the cognitive aspect and violation relates to the emotional aspect of a failure in the psychological contract (Eckerd et al., 2013, p. 569).

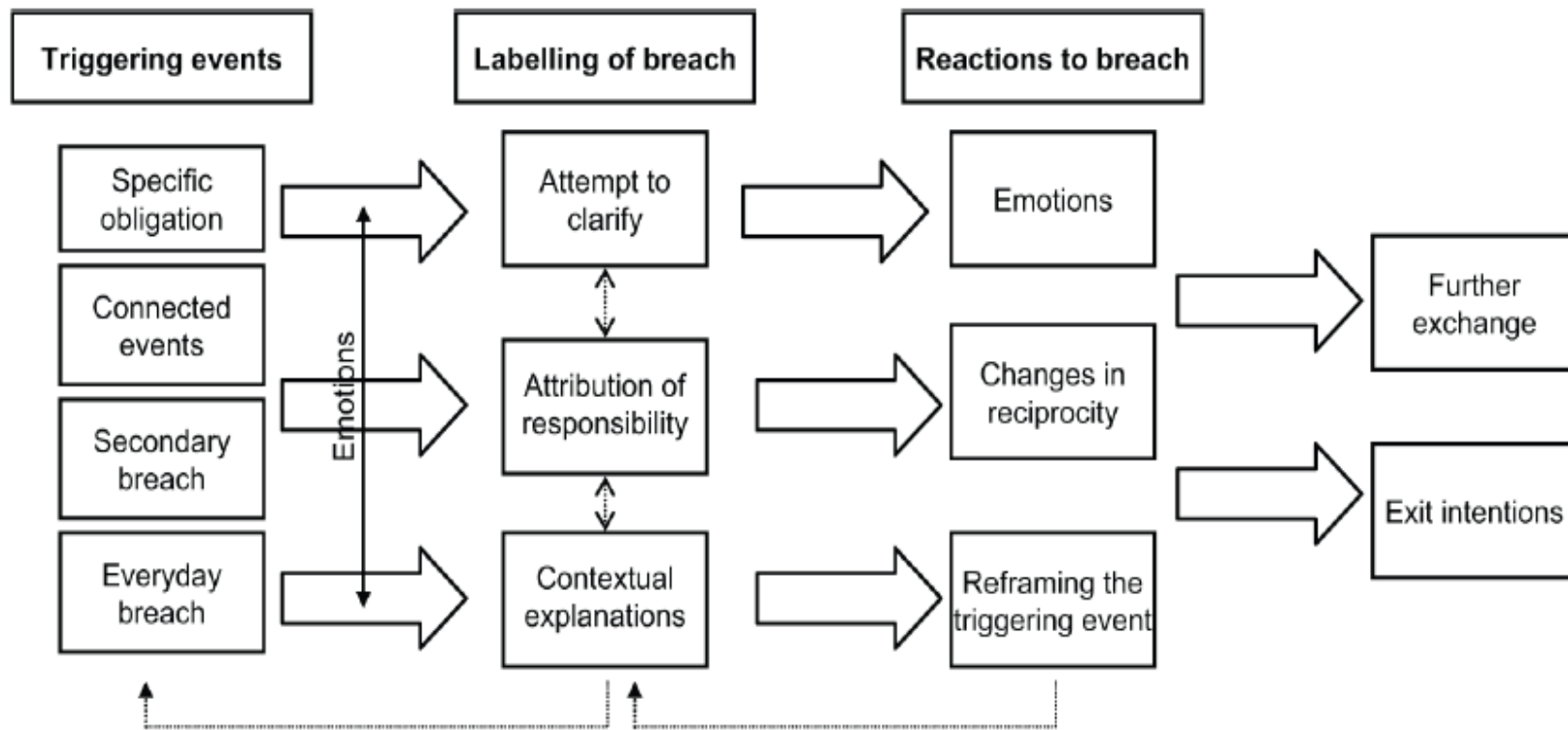
Organizational failure to fulfil obligations is associated with emotional exhaustion and job dissatisfaction of the employees (Gakovic & Tetrick, 2003). Psychological contracts, and particularly their breach on the part of the organisation, play a role in employees' experience of stress (Gakovic & Tetrick, 2003). Psychological contract fulfilment increases commitment and decreases psychological distress (Rodwell & Ellershaw, 2015). The importance of attending to PCB is evident from the literature showing the negative impact of it on important organizational outcomes, such as a) citizenship behaviour, b) commitment, c) job satisfaction, and d) employee intention to remain with the organisation (Ahmed & Khan, 2015; Robinson et al., 1994)

When employers do not fulfil their promises and obligations, the employee reciprocates by altering his or her contributions to the organization. (Bal, Chiaburu, & Jansen, 2010, p. 253). However, individuals do not react in the same way to violations; a) some have the ability to reactivate the original pre-violation contract, b) while others have the ability to form a new contract that might be more or less attractive than the original contract, or c) they end up in a state of dissolution unable to form a new contract with the employer (Tomprou et al., 2015).

Employees may arrive at a verdict of breaches as a result of continuous minor events that alone are insufficient to trigger breach perceptions; however, the accumulation may lead to perceptions of breach (Parzefall & Coyle-Shapiro, 2011). Employees need to make sense of the incongruous event(s) in the exchange if they want to understand, explain, and construct an account of what happened and why by searching for a culprit and trying to understand the reasons. It is also important to understand the interplay between a) cognition, b) emotion, and c) action in individual responses to the breach

(Parzefall & Coyle-Shapiro, 2011). This process of sense making is displayed in the figure (Figure 11) below ending in either further exchange or the intention to exit.

Figure 11: The process of making sense of psychological contract breach+(Parzefall & Coyle-Shapiro, 2011, p. 22)



2.6 Chapter conclusion

The value of an engaged workforce is repeated in the literature (Bakker & Leiter, 2010; Rayton & Yalabik, 2014; Scrima et al., 2014). It emphasises a positive relationship between work engagement and performance that, according to Harter et al. (2002) translates into:

- higher organizational profitability,
- more customer satisfaction and loyalty,
- enhanced productivity,
- lower employee turnover
- improved safety.

The impact that job satisfaction has on the performance and engagement of the workforce is also supported by various studies in the literature (Adenike, 2011; Locke, 1969, 1970; Rayton and Yalabik, 2014; Swaminathan & Jawahar, 2013). This positive relationship between job satisfaction and organizational commitment confirm the importance for organisations to understand the drivers of job satisfaction and how this can be improved (Mohammed & Eleswed, 2013).

The value of organizational support and how employees experience and react on this has also been well covered in the literature. This shows that organizational support has an impact on job satisfaction and how employees commit to the organisation (Eisenberger et al., 1986; Eisenberger et al., 1990; Eisenberger, Stinglhamber & Vandenberghe, 2002; Leppel et al., 2012 Neves & Eisenberger, 2012). Employees that experience organizational support increase their efforts to support the organizational goals (Eisenberger et al., 1986).

The literature also covers the cause and effect of psychological contract breach and its impact on the engagement of the workforce and the performance of the organisation (Bal et al, 2010; Eckerd et al., 2013; Gakovic and Tetrick, 2003; Morrison & Robinson, 1997; Robinson and Morrison, 2000). By ensuring that the psychological contract is upheld the organisation will increase organizational commitment and decrease psychological distress (Rodwell & Ellershaw, 2015).

This study was undertaken to confirm previous research with regards to positive outcomes that, a) a higher level of work engagement, b) better job satisfaction and c) organizational support have on the performance of employees and an organisation. This study aims to add to the literature on complex relationships like psychological contract

breach and work engagement by including job satisfaction and organizational support as moderators. It is hoped that this will enable a better understanding of the complexity of the relationships that organisations have to manage. It is also hoped that this will guide organisations as to how they can focus limited resources to add value to their businesses by having a better understanding of these relationships.

Chapter 3: Hypotheses

The main objectives of this research are:

Objective 1: Determine the relationship between psychological contract breach and work engagement.

- H_0 1: There is no linear relationship between psychological contract breach and work engagement.
- H_a 1: There is a linear relationship between psychological contract breach and work engagement.

Objective 2: Determine the relationship between job satisfaction and work engagement.

- H_0 2: There is no linear relationship between job satisfaction and work engagement.
- H_a 2: There is a linear relationship between job satisfaction and work engagement.

Objective 3: Determine the relationship between organizational support and work engagement.

- H_0 3: There is no linear relationship between organizational support and work engagement.
- H_a 3: There is a linear relationship between organizational support and work engagement.

Objective 4: Determine the moderating effect of job satisfaction on the relationship between psychological contract breach and work engagement.

- H_0 4: Job satisfaction has no moderating effect on the relationship between psychological contract breach and work engagement.
- H_a 4: Job satisfaction has a moderating effect on the relationship between psychological contract breach and work engagement.

Objective 5: Determine the moderating effect of organizational support on the relationship between psychological contract breach and work engagement.

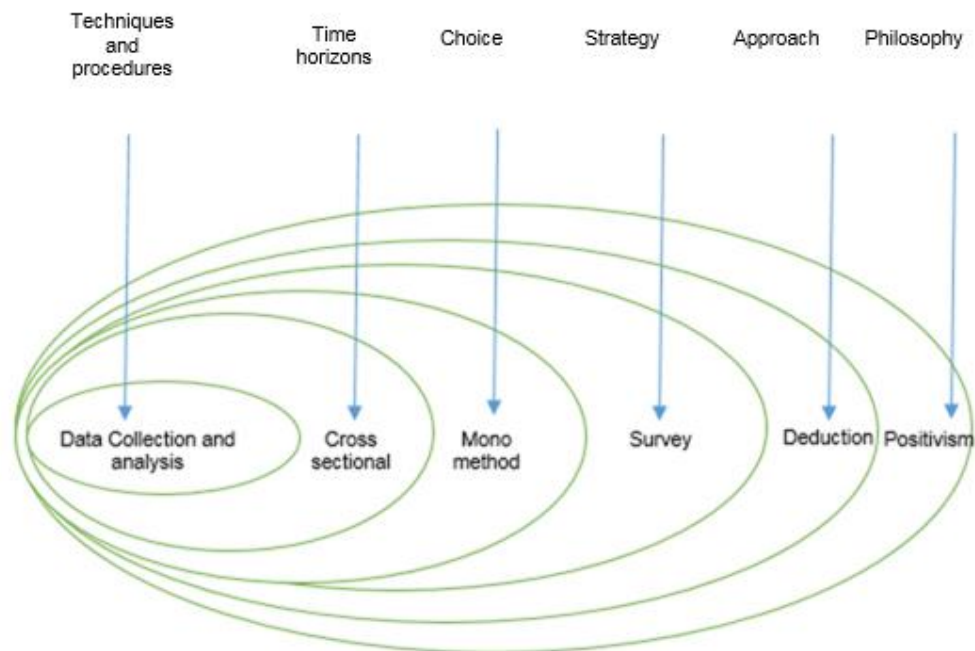
- H_0 5: Organizational support has no moderating effect on the relationship between psychological contract breach and work engagement.
- H_a 5: Organizational support has a moderating effect on the relationship between psychological contract breach and work engagement.

Chapter 4: Research methodology

4.1 Research method

The research methodology that was used was a quantitative casual design approach. A deductive research approach was used to test the theoretical propositions, for explanatory research by using a pre/quasi experimental design. The method of research can be explained by using the %Research onion+as follows (Saunders & Lewis, 2012). The philosophy was a positivist one with a deduction approach. A survey strategy was used as a mono method. The data is cross-sectional and was collected and analysed by using statistical techniques.

Figure 12: %The research onion (Adapted from Saunders, Lewis & Thornhill, 2008, cited in Saunders & Lewis, 2012, p.103).



4.2 Rationale for research method

%The main concern for a philosophical positivism approach is to study observable and measurable variables in certain controllable conditions and to describe the reaction of these variables to treatment applied by the researcher+(Saunders & Lewis, 2012, p.105). %The emphasis is on predicting the outcomes of the research so that these variables may

be controlled in the future+(Saunders & Lewis, 2012, p.105). At the root of the positivist research philosophy is the law of cause and effect (Saunders & Lewis, 2012). This study examined the causal relationship between the independent variable . psychological contract breach and its moderators, organizational support and job satisfaction and the dependant variable, work engagement. This method is highly structured to facilitate replication that will result in law-like generalizations (Saunders & Lewis, 2012). These generalisations assisted in understanding the role of organizational support in moderating the impact of PCB on work engagement and could assist organisations by reducing the impact on the relationship through identifying proactive actions to take. It also assisted in understanding the role of job satisfaction as moderating factor on the relationship between PCB and work engagement. This understanding will assist organisations to increase work engagement by acting proactively in a dynamic environment through job satisfaction.

%Deduction is a research approach which involves the testing of a theoretical proposition by using a research strategy specifically designed for the purpose of its testing+(Saunders & Lewis, 2012, p.108). The key characteristics of deduction are to explain a causal relationship between variables, and because this study attempts to do this, the deduction approach was selected (Saunders & Lewis, 2012).

4.3 Research process

%A survey is a research strategy which involves the structured collection of data from a sizeable population+(Saunders & Lewis, 2012, p.115). Data collection may take the form of questionnaires, structured observation and structured interviews (Saunders & Lewis, 2012). In this study, a mono method was selected with an online survey questionnaire as the strategy. A survey was chosen because it allowed the collection of data about the same topics from a large number of people in a cost-effective manner (Saunders & Lewis, 2012). One of the drawbacks of the survey is that data collected were unlikely to be as detailed as those collected by other research strategies. (Saunders & Lewis, 2012).

4.4 Population and unit of analysis

The population of the study included all the members of a service provider. These members are employed at different organisations across various industries within South

Africa. The population was about 139 000 members. The researcher has a relationship with the service provider of these members and formal written permission was granted by the Managing Director of the service provider to allow access to the members via their contact details. The service provider also supplied a route that facilitated access to the population from which an online survey was distributed to the target population. The researcher was able to obtain the complete list of the members of the population from which only the members with email addresses made up the sample frame (Saunders & Lewis, 2012). The unit of analysis for the study was a member of the service provider of which the organisations they work for were related or unrelated to the service provider.

4.5 Size and nature of sample

Researchers normally collect data from a sample rather than the whole population simply because it is more practicable (Saunders & Lewis, 2012). Since this researcher had a complete list of the population, a probability sampling technique was used. By using a stratified random sampling technique members with and without email addresses were divided into two groups. A random sample of 8 000 members were selected from the group with email addresses (which ended up as 7 932) after which members with incomplete email addresses were taken out.

4.6 Survey design

The survey was designed as an online survey and covered three basic sections, (a introduction; b) biographical data; and c) survey questions. The section relating to biographical data consisted of six specific categorical questions with the purpose of obtaining the respondents personal information to be used for analytical purposes. This included a) age, b) gender, c) highest qualification, d) service years at current company, e) total years working experience, and f) industry of the respondent. The purpose of the sections relating to the survey questions was to address the research questions specifically. A Likert-type scale with six options from one extreme to the other was used. The statements used to measure the four constructs below were obtained from previous studies with more detail per construct as follows.

Work engagement. The short form of UWES-9 following Schaufeli et al., (2006) was used to measure work engagement. The three variables of work engagement; a) vigour, b) dedication and c) absorption were measured by the

scale. This conceptualisation of engagement was the most theoretically and empirically developed engagement construct in the literature (Rayton & Yalabik, 2014). This measure was used as the UWES-9 score was concluded as having acceptable psychological properties and that the instrument could be used for studies on positive organizational behaviour (Schaufeli et al., 2006). This confirms the reliability and validity of the questions used. Researchers strive to include as few items as possible for measuring a particular construct because respondents ought not to be unnecessarily bothered. In addition, long questionnaires increase the likelihood of attrition (Schaufeli et al., 2006). A six-point Likert scale with anchors from (1) strongly agree to (6) strongly disagree was used.

Job satisfaction. The Michigan Organizational Assessment Questionnaire, a three-item measure of overall job satisfaction was used. This has been meta-analysed and found to have acceptable reliability across the multitude of studies since it was first published (Bowling & Hammond, 2008). Positive and negative questions were included in the list of job satisfaction questions. A six point Likert scale with anchors from (1) strongly agree to (6) strongly disagree was used.

Psychological contract breach. A five-item scale for measurement of PCB by Robinson and Morrison (2000) was used. This scale is a global measure of breach and replaces the use of multiple questions to ask about specific domains within which breach may or may have not occurred (Rayton & Yalabik, 2014). Such global measures are effective tools for capturing overall perceptions of how much an organisation has fulfilled (or not) its promises (Rayton & Yalabik, 2014, p. 2389). Greater detail may be warranted for understanding the full variety of the sources of breach, but a global measure is appropriate for analysing the implications of breach, and this explains its use in a wide variety of studies (Rayton & Yalabik, 2014, p. 2389). Positive and negative questions were included in the list of PCB questions. A six-point Likert scale with anchors from (1) strongly agree to (6) strongly disagree was used.

Organizational support. To measure the extent to which employees perceived that the organisation valued their contribution and cared about their well-being, an eight-item questionnaire relating to Perceived Organizational Support (Eisenberger et al., 1986) was used. The survey comprised statements concerning the organisation's valuation of the employee, and actions it would be likely to take in situations that affected the employee's well-being Eisenberger et

al., 1990). Positive and negative questions were included in the list of organizational support questions. A six-point Likert scale with anchors from (1) strongly agree to (6) strongly disagree was used.

From what the researcher could find in the literature, this was the first time that these four questionnaires were used together as a unit.

4.7 Pilot Survey

The term *pilot study* refers to a pre-test of a research instrument such as a questionnaire. Pilot studies are a crucial element of a good study design+(Van Teijlingen & Hundley, 2001, p.1). A pilot test is used to identify any problems in the questions and techniques that the researcher decides to use. Feedback from the respondents that participate in a pilot study will ensure that one can identify any structural issues (technology) and that questions are understood (Saunders & Lewis, 2012). Such ambiguities and difficult questions can then be adjusted (Van Teijlingen & Hundley, 2001).

The survey was pilot tested by 20 convenient selected members and non-members of the service provider. The feedback received was positive and specifically mentioned that: a) the flow was good; b) questions were easy to understand; and c) the survey tool was easy to use. Fourteen of the 20 individuals completed the pilot test survey that was sent out. As a result, based on the feedback that was received, no changes were made to the questionnaire.

4.8 Data collection, data analysis and management

Questionnaires are used widely to collect data (Saunders & Lewis, 2012). The term *questionnaire* refers to all methods of data collection in which each potential respondent is asked to answer the same set of questions in the same order (Saunders & Lewis, 2012). This can be done on the Web, by post, by hand, telephone or face to face. Data in this survey was collected via an email that was sent out from an online survey tool by using the log-in details provided by the service provider. The emails that were sent out had a hyperlink to the Web survey and made mention that the survey was done with the support of the service provider. This was done as it was proposed that the relationship that the service provider has with the members would increase the response rate.

The emails were sent out in eight tranches. A once-off reminder per email tranche was sent out to the recipients within a week of the original email to increase the response rate. A total of 7 932 emails were sent out with 1 201 respondents or 15.1% at the time the data was used. Of these, 85.7% were completed in total that translates to 1 029 responses which were used and the rest was discarded. The collection of the data through the Web allowed for the data to be collated without having to re-capture any of it as the data were exported to excel. After the data were used another 35 respondents completed the survey before the survey was closed. These 35 respondents that completed the survey after the data was downloaded were excluded from the data analysis for this study. The survey was kept open for a period of eight weeks. The Likert scales were consistent from one to six. During the analysis of the data the Likert scale measure of 1-6 was changed to 0-5 and negative questions were furthermore reversed. The survey is attached in appendix 1.

4.9 Reliability and Validity

4.9.1 Reliability

Reliability refers to the degree of consistency of the methods and analysing techniques applied to ensure that the findings can be trusted (Saunders & Lewis, 2012). Consistency is important to ensure that, if done by other researchers in the future, the same results will be obtained with the same methods and procedures. These should give clear and concise explanations for others about the conclusions from the data collected (Saunders & Lewis, 2012). Factors that threaten reliability include a) subject error, b) subject bias, c) observer error and d) observer bias (Saunders & Lewis, 2012).

To measure the internal consistency the researcher used Cronbach's alpha. Cronbach's alpha coefficient is used to measure the internal consistency between variables (Tavakol & Dennick, 2011). The Cronbach's alpha for the different subscales were:

- a) job satisfaction (JS) - 0.79;
- b) psychological contract breach (PCB) - 0.90;
- c) work engagement (WE) - 0.92; and
- d) organizational support (OS) - 0.93.

A Cronbach's alpha score above 0.60 to 0.70 is regarded by industry as acceptable where a score of 0.8 and above is regarded as good (Nunnally, 1978). The overall

standardised Cronbach's alpha for the total score of the dimensions of analysis was 0.95. This is excellent and shows very high levels of internal consistency. No items were removed to increase the Cronbach's alpha further.

Table 1: The Cronbach's alphas and item analysis.

Construct	Item	Job satisfaction (JS)	Psychological contract breach (PCB)	Work engagement (WE)	Organizational support (OS)
JS	1	0.6218			
JS	2	0.8014			
JS	3	0.6913			
PCB	4		0.8628		
PCB	5		0.8708		
PCB	6		0.8604		
PCB	7		0.9272		
PCB	8		0.8845		
WE	9			0.9007	
WE	10			0.8981	
WE	11			0.8960	
WE	12			0.8980	
WE	13			0.8992	
WE	14			0.9153	
WE	15			0.9148	
WE	16			0.9117	
WE	17			0.9130	
OS	18				0.9243
OS	19				0.9306
OS	20				0.9266
OS	21				0.9251
OS	22				0.9231
OS	23				0.9253
OS	24				0.9220
OS	25				0.9225
Sub total		0.7853	0.9038	0.9151	0.9337
Combined test scale for all 25 items Cronbach's alpha					0.9546

JS – Job satisfaction, PCB – Psychological contract breach, WE – Work engagement, OS – Organizational support

4.9.2 Validity

The validity of the constructs are tested by an exploratory factor analysis. To perform the factor analysis five observations per item are needed. There were 25 items that had to be included in the factor analysis which would result in at least 125 observations as required. Since 1 029 observations were recorded and included in the study, an exploratory factor analysis could be done. Principle factor analysis was employed and the results revealed that three factors had Eigenvalues of greater than one. Eigenvalues indicate the amount of variance explained by each factor. Kaiser-Meyer-Olkin (KMO) criterion, suggested by Guttman and adapted by Kaiser (1974), considers factors with eigenvalues greater than one as common factors. A Kaiser-Meyer-Olkin (KMO) was done to measure the adequacy of the sample (see Table 2 below).

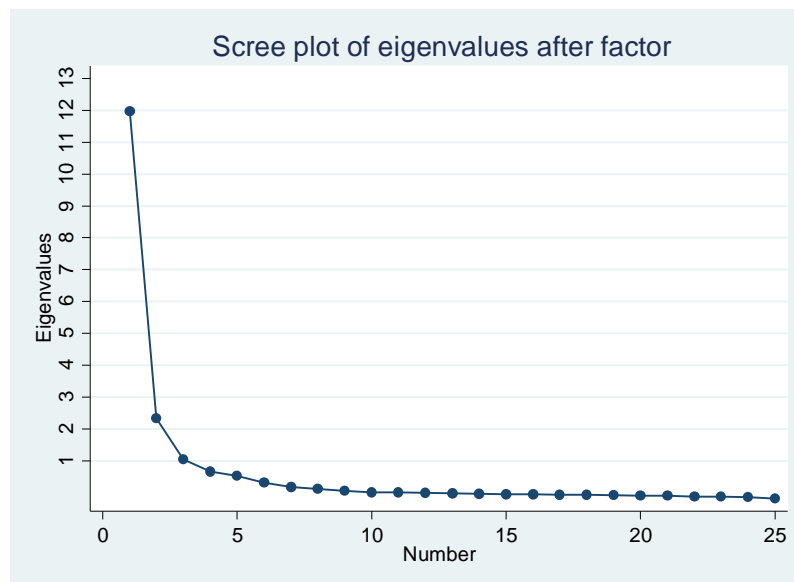
Table 2: Factor analysis - Principle factor analysis (Unrotated)

Factor	Eigenvalue	Difference	Proportion	Cumulative
1	11.96261	9.62477	0.7424	0.7424
2	2.33785	1.30069	0.1451	0.8875
3	1.03716	0.36982	0.0644	0.9518
4	0.66734	0.14491	0.0414	0.9932
5	0.52242	0.21162	0.0324	1.0257

Note: N = 1029

Retained factors = 3 (> 1)

Figure 13: Scree plot of eigenvalues after factor analysis.



The first three eigenvalues are >1 therefore three factors to be included. Although one would expect four factors because of the four constructs, the results presented illustrate that items can load in more than one factor and this also showed that the items belong together, see figure 13 above and table 3 below.

Table 3: Factor loadings

Variable	Factor 1	Factor 2	Factor 3	Uniqueness
All in all I am satisfied with my job	0.7406			0.4311
In general I don't like my job	0.5685			0.6497
In general I like working here	0.7112			0.4778
Almost all the promises made by my employer during recruitment have been kept so far	0.7509	-0.3327	0.4166	0.1519
I feel that my employer have come through in fulfilling the promises made to me when I was hired	0.7177	-0.3296	0.4301	0.1912
So far my employer has done an excellent job of fulfilling its promises to me	0.7754	-0.3335	0.3959	0.1308
I have not received everything promised to me in exchange for my contributions	0.4544	-0.3125		0.6849
My employer has broken many of its promises to me even though I've upheld my side of the deal	0.6653	-0.3574		0.4068
At my work I feel like I am bursting with energy	0.7450	0.3744		0.3040
At my job I feel strong and vigorous	0.7835	0.3817		0.2387
I am enthusiastic about my job	0.7785	0.4261		0.2119
My job inspires me	0.7784	0.3832		0.2467
When I get up in the morning I feel like going to work	0.8153			0.2555
I feel happy when I am working intensely	0.4684	0.3108		0.6784
I am proud on the work that I do	0.4454	0.3918		0.6466
I am immersed in my work	0.4659	0.4346		0.5912
I get carried away when I am working	0.4688	0.3883		0.6253
The organisation values my contribution to its well-being	0.7925			0.3377
The organisation fails to appreciate any extra effort from me	0.6129	-0.3187		0.4402
The organisation would ignore any complaint from me	0.6845	-0.3179		0.3782
The organisation really cares about my well-being	0.7740			0.3612
Even if I did the best job possible, the organisation would fail to notice	0.7126	-0.3410	-0.3135	0.2776
The organisation cares about my general satisfaction at work	0.7946			0.3466
The organisation shows very little concern for me	0.7349		-0.3229	0.2748

The organisation takes pride in my accomplishments at work	0.7778			0.3237
------------------------------------------------------------	--------	--	--	--------

(Blanks represent loading <0.3)

Table 4: Rotated factor loadings - Oblique Oblimin rotation pattern and unique matrix.

Variable	Factor 1	Factor 2	Factor 3	Uniqueness
All in all I am satisfied with my job	0.4688		0.3214	0.4311
In general I don't like my job	0.4693			0.6497
In general I like working here	0.4366		0.3121	0.4778
Almost all the promises made by my employer during recruitment have been kept so far			0.9245	0.1519
I feel that my employer have come through in fulfilling the promises made to me when I was hired			0.9295	0.1912
So far my employer has done an excellent job of fulfilling its promises to me			0.9068	0.1308
I have not received everything promised to me in exchange for my contributions			0.4383	0.6849
My employer has broken many of its promises to me even though I've upheld my side of the deal			0.5841	0.4068
At my work I feel like I am bursting with energy	0.7932			0.3040
At my job I feel strong and vigorous	0.8200			0.2387
I am enthusiastic about my job	0.8706			0.2119
My job inspires me	0.8201			0.2467
When I get up in the morning I feel like going to work	0.7235			0.2555
I feel happy when I am working intensely	0.5881			0.6784
I am proud on the work that I do	0.6667			0.6466
I am immersed in my work	0.7260			0.5912
I get carried away when I am working	0.6755			0.6253
The organisation values my contribution to its well-being	0.3103	0.5518		0.3377
The organisation fails to appreciate any extra effort from me		0.7801		0.4402
The organisation would ignore any complaint from me		0.7348		0.3782
The organisation really cares about my well-being		0.5028		0.3612
Even if I did the best job possible, the organisation would fail to notice		0.8636		0.2776
The organisation cares about my general satisfaction at work		0.5012		0.3466
The organisation shows very little concern for me		0.8483		0.2748
The organisation takes pride in my accomplishments at work		0.6593		0.3237

(Blanks represent loading <0.3)

A Kaiser-Meyer-Olkin (KMO) measure was calculated and the overall value was 0.96. Kaiser recommend that values greater than 0.50 be accepted (Kaiser, 1974). The overall value of 0.9555 is labelled as marvellous.

Table 5: Kaiser-Meyer-Olkin (KMO)

Variable	kmo
All in all I am satisfied with my job	0.9692
In general I don't like my job	0.9710
In general I like working here	0.9769
Almost all the promises made by my employer during recruitment have been kept so far	0.9462
I feel that my employer have come through in fulfilling the promises made to me when I was hired	0.9424
So far my employer has done an excellent job of fulfilling its promises to me	0.9418
I have not received everything promised to me in exchange for my contributions	0.9226
My employer has broken many of its promises to me even though I've upheld my side of the deal	0.9508
At my work I feel like I am bursting with energy	0.9227
At my job I feel strong and vigorous	0.9181
I am enthusiastic about my job	0.9565
My job inspires me	0.9516
When I get up in the morning I feel like going to work	0.9770
I feel happy when I am working intensely	0.9614
I am proud on the work that I do	0.9412
I am immersed in my work	0.9256
I get carried away when I am working	0.9413
The organization values my contribution to its well-being	0.9739
The organization fails to appreciate any extra effort from me	0.9683
The organization would ignore any complaint from me	0.9717
The organization really cares about my well-being	0.9773
Even if I did the best job possible, the organization would fail to notice	0.9483
The organization cares about my general satisfaction at work	0.9737
The organization shows very little concern for me	0.9630
The organization takes pride in my accomplishments at work	0.9607
Overall	0.9555

4.10 Data analysis

Data was collected by making use of a scale with six different options that was marked 1 to 6 starting at *strongly agree* and ending at *strongly disagree*. Data was then rescaled from 1-6 to 0-5. The table before and after the rescaling was the same, with the exception that the scale was adjusted to 0-5. After the rescaling the negative questions included in the questionnaire were reversed to align the feedback.

Table 6: An example that illustrates the change in negative questions.

	PCB5_0N**						
PCB5_0*	0	1	2	3	4	5	Total
0	0	0	0	0	0	101	101
1	0	0	0	0	146	0	146
2	0	0	0	146	0	0	146
3	0	0	99	0	0	0	99
4	0	181	0	0	0	0	181
5	356	0	0	0	0	0	356
Total							1029

*PCB5_0 . Psychological contract breach question 5 rescaled from 1-6 to 0-5

**PCB5_0N . Psychological contract breach question 5 negative questions reversed after rescaling

The rescaling and reversal of negative questions were done to calculate a composite score that adds to the validity and reliability of the information used in this study.

Three factors were confirmed to be more than one, and this allowed the testing of hypothesis to better understand the underlying relationships observed between the variables.

A simple linear regression model was used to explore the relationships between two constructs at a time. The simple linear regression model findings were used to inform the decision to reject or accept the hypothesis.

A multi variable regression model was used to explore the relationship between three constructs where one was a moderator. The multi variable regression model was used to analyse the impact of the independent and moderator variables on the dependent variable. If it was found that the p-value was significant (<0.05) the null hypothesis was rejected and the alternate hypothesis was accepted because of the significant finding (Saunders & Lewis, 2012).

Binary data was used to simplify the interaction between the independent variable, moderator variable and dependent variable. This was done by grouping the data on the 0 . 5 scale into two categories namely ~~G~~Goodq(0, 1, 2, 3) which is seen as tolerable and ~~B~~Badq(4, 5) which is seen as intolerable per item. The binary data were used to run a logistic regression to explore the association between the independent variable, the moderator variable and the interaction term. The predicted margins were then reported based on the results from the logistic regression. The predicted margins were used to

explore the extent of the effect that the moderator has on the relationship between PBC and work engagement.

4.11 Research limitations

Owing to the nature of the study and the time constraints of the research project, the following items have been identified as research limitations:

- The research was conducted as a cross-sectional study due to time constraints, which does not provide the depth of analysis of a longitudinal study.
- The research investigated the casual relationship between psychological contract breach, organizational support, job satisfaction and work engagement, but did not examine other factors that influence work engagement.
- The study was done within the boundaries of South Africa and did not include cross- border respondents or other African or world countries intentionally.
- The study only included respondents with access to email and internet.
- The nature of the business of the service provider could attract people with similar beliefs and values and this could exclude people with other beliefs and values.

Chapter 5: Results

5.1 Chapter introduction

Results reported in this chapter will pertain to the data collected as described in Chapter 4. No data was excluded because the Cronbach's alphas were acceptable for all four constructs included in the study.

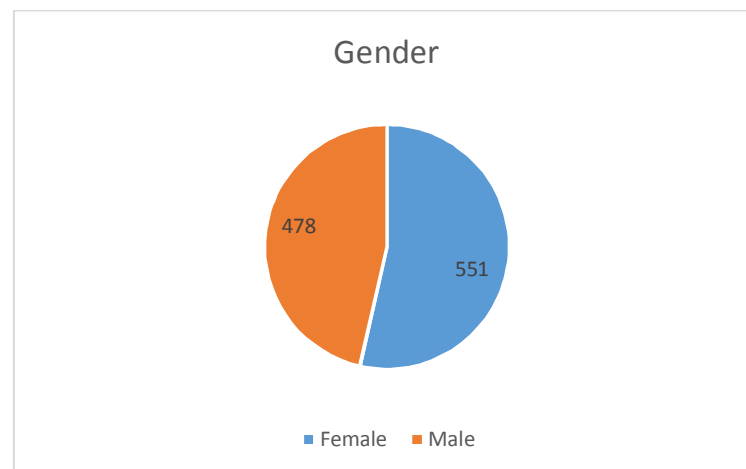
5.2 Descriptive statistics

The number of respondents received for the data used in the study were 1 201 (15.1% response rate) with 172 of these being incomplete. Where incomplete responses to the whole survey were received from respondents they were excluded entirely. This resulted in 1 029 responses being included in the analysis.

5.2.1 Gender

Of the 1 029 respondents received 551 (53.5%) were from women and 478 (46.5%) were men. This is reflected in Figure 14 below.

Figure 14: Female respondents and Male respondents



Note: N = 1029

Source: Author's own

Table 9 below reflects the mean scores across gender for a) work engagement, b) job satisfaction, c) organizational support, and d) psychological contract breach. The lower the mean score the higher the level of work engagement, job satisfaction and organizational support are perceived; but the higher the mean score for PCB the higher the level of breach is experienced. Higher levels of job satisfaction and organizational

support were found among women than among men, and lower levels of PCB were perceived by female respondents than by male respondents. Men, however, show a higher level of work engagement than women - as found on the Utrecht Work Engagement Scale in line with previous findings ((Schaufeli & Bakker, 2004)

Table 7: Mean scores across gender

	Number of respondents	Work engagement	Job Satisfaction	Organizational Support	Psychological contract breach
Male	478	11.79	4.12	18.73	10.08
Female	551	12.23	3.68	18.28	8.42

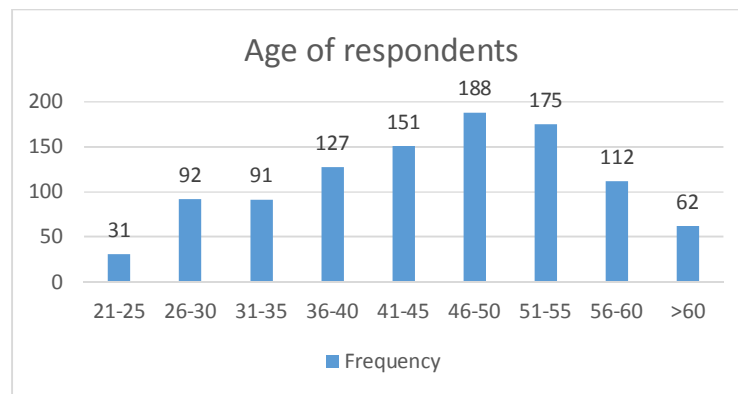
Note: N = 1029

5.2.2 Age

Of the 1 029 respondents 214 (20.8%) were younger than 36 years of age (31 respondents aged 21 - 25). The rest were as follows:

- there were 92 respondents aged 26 -30;
- there were 91 respondents from 31 . 35 years;
- there were 278 (27.0%) respondents aged from 36 years to 45 years old (and of those 127 respondents were 36-40 years old and 151 were from 41 . 45 years old);
- there were 363 (35.3%) respondents from 46 . 55 years of age (188 respondents 46 . 50 years old and 175 respondents 51 to 55 years old);
- There were 174(16.9%) respondents aged 56 years and older (which included 112 respondents 56 to 60 years old and 62 respondents above 60 years). This is reflected in the histogram below (see Figure 15).

Figure 15: Age of respondents.



Note: N = 1029

Source: Author's own

Table 10 below reflects the quantity of respondents per age bracket as well as the mean score per construct (work engagement, job satisfaction, organizational support and PCB).

- The highest level (lowest mean) of work engagement was measured in the age bracket above 60 years of age.
- The highest level (lowest mean) of job satisfaction and organizational support was found to be experienced by the respondents older than 60 years of age. They also perceive to have experienced the lowest level (lowest mean) of PCB.
- The lowest level (highest mean) of work engagement and job satisfaction was experienced by respondents between 26 -30 years.
- The lowest level of organizational support (highest mean) was experienced by those respondents between the ages of 46 -50 years.
- The highest level of PCB (highest mean) experienced by respondents between the 56-60 years.

Table 8: Mean scores across age brackets

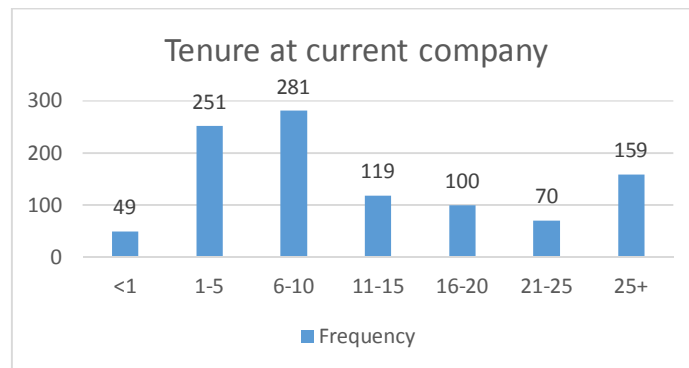
Age brackets	Number of respondents	Work engagement	Job Satisfaction	Organizational Support	Psychological contract breach
21-25	31	10.45	3.42	16.03	8.45
26-30	92	14.03	4.51	18.67	9.25
31-35	91	13.21	4.42	19.04	9.34
36-40	127	13.62	4.16	18.92	9.41
41-45	151	11.68	3.53	17.24	8.29
46-50	188	11.85	3.99	19.95	9.66
51-55	175	12.23	3.96	18.79	9.43
56-60	112	10.83	3.77	19.66	10.17
>60	62	7.74	2.39	13.35	7.08

Note: N = 1029

5.2.3 Tenure

Figure 16 below indicates the frequency of the respondents' tenure at the current company. It can be seen on the histogram that the majority of the respondents (51.7%) have been working for their company for 1-10 years (251 have a tenure of 1-5 years and 281 a tenure of 6-10 years), and a large portion of the respondents (15.5%) have a tenure of more than 25 years.

Figure 16: Tenure at current company.



Note: N = 1029

Source: Author's own

Table 11 below reflects the mean scores of work engagement, job satisfaction, organizational support and PCB across the different tenures of the respondents.

- Respondents with less than one year service have the highest level of engagement (lowest mean) and it was clear that there is no relationship between tenure and work engagement.
- The highest level of job satisfaction and organizational support is also experienced by respondents with less than a year's service. They also experience the lowest level of PCB.
- The lowest level of work engagement, job satisfaction and organizational support was found to be by the respondents in the 21 - 25 years service bracket. They also perceive the highest level of contract breach across the different tenure intervals.

Table 9: Mean scores across tenure.

Tenure	Number of respondents	Work engagement	Job Satisfaction	Organizational Support	Psychological contract breach
0-1	49	9.12	2.96	11.84	6.31
1-5	251	11.80	3.74	17.48	8.39
6-10	281	12.67	4.14	19.01	9.84
11-15	119	11.08	3.55	18.43	8.70
16-20	100	12.48	4.16	18.91	9.55
21-25	70	14.06	4.33	21.40	10.61
25	159	11.65	3.83	19.70	9.70

Note: N = 1029

5.2.4 Descriptive statistics of full sample

Table 12 below includes the sum of the means, standard deviation and Cronbach's alphas and the correlations of job satisfaction, PCB, work engagement and organizational support.

Table 10: Means, Standard Deviations (SD), Reliabilities (Cronbach's Alpha) and Pearson's correlations (r) for all variables.

		Mean	Standard deviation	Cronbach's alpha	1	2	3	4
1	Job satisfaction	3.88	3.36	0.79	1			
2	Psychological contract breach	9.19	7.16	0.90	0.5941*	1		
3	Work engagement	12.02	9.95	0.92	0.7215*	0.4956*	1	
4	Organizational support	18.49	11.40	0.93	0.6488*	0.7054*	0.6202*	1

Note: N = 1029

*p < 0.0001

5.3 Results

5.3.1 Objective 1

Determine the relationship between psychological contract breach and work engagement.

- H_{01} : There is no linear relationship between psychological contract breach and work engagement.
- H_{a1} : There is a linear relationship between psychological contract breach and work engagement.

Table 11: Objective 1 . Statistical analysis

Independent variable	Linear relationship	R ²	p-value
Psychological contract breach	Work engagement = 5.689+0.689(PCB)	0.2456	<0.0001

The regression analysis test result found that there is a significant linear relationship ($p < 0.001$) between PCB and work engagement. The null-hypothesis, H_{01} , is rejected. It is concluded that the overall fit of the model of Objective 1 is significant and the alternate Hypothesis, H_{a1} , was confirmed.

The R-Square value of 0.2456, if expressed as a percentage (24.56%), confirms that 24.56% of the variation in the dependent variable, work engagement is explained by the variation in the explanatory variable, PCB. Also the parameter estimate of the PCB variable was significant and indicates that if PCB increases by 1 standard deviation, work engagement will deteriorate by 0.689 resulting in a lower level of work engagement. Work engagement can be calculated by using the data from the regression analysis as follows: $WE = 5.689 + 0.689(PCB)$.

5.3.2 Objective 2

Determine the relationship between job satisfaction and work engagement.

- H_{02} : There is no linear relationship between job satisfaction and work engagement.
- H_{a2} : There is a linear relationship between job satisfaction and work engagement.

Table 12: Objective 2 . Statistical analysis.

Independent variable	Linear relationship	R ²	p-value
Job satisfaction	Work engagement = 4.223+2.008(JS)	0.5205	<0.0001

The regression analysis test result found that there is a significant linear relationship ($p < 0.001$) between job satisfaction and work engagement. The null-hypothesis, H_{02} , was rejected. It was concluded that the overall fit of the model of objective 2 was significant and the alternate hypothesis, H_{a2} , was confirmed.

The R-Square value of 0.5205, if expressed as a percentage (52.05%), confirms that 52.05% of the variation in the dependent variable, work engagement is explained by the variation in the explanatory variable, job satisfaction. The parameter estimate of the job satisfaction variable is significant and indicates that if job satisfaction increases by 1 standard deviation, work engagement will increase by 2.008 resulting in a higher level of work engagement. Work engagement can be calculated by using the data from the regression analysis as follow: $WE=4.223+2.008(JS)$.

5.3.3 Objective 3

Determine the relationship between organizational support and work engagement.

- H_{03} : There is no linear relationship between organizational support and work engagement.
- H_{a3} : There is a linear relationship between organizational support and work engagement.

Table 13: Objective 3 . Statistical analysis

Independent variable	Linear relationship	R ²	p-value
Organizational support	Work engagement = 2.015+0.541(OS)	0.3846	<0.0001

The regression analysis test result found that there is a significant linear relationship ($p < 0.001$) organizational support and work engagement. The null-hypothesis, H_{03} , is rejected. It is concluded that the overall fit of the model of Objective 3 is significant and the alternate hypothesis, H_{a3} , is confirmed.

The R-Square value of 0.3846, if expressed as a percentage (38.46%), confirms that 38.46% of the variation in the dependent variable, work engagement is explained by the variation in the explanatory variable, organizational support. The parameter estimate of the organizational support variable is significant and indicates that if job satisfaction increases by 1 standard deviation, work engagement will increase by 0.541 resulting in a higher level of work engagement. Work engagement can be calculated by using the data from the regression analysis as follows: $WE = 2.015 + 0.541(OS)$.

The correlation between the sub-scale scores shows that there are strong correlations in Figure 16 below and this gave rise to assessing these subscales as potential moderators, in particular that of job satisfaction and work engagement at 0.7215 ($p < 0.0001$) and organizational support and work engagement at 0.6202 ($p < 0.0001$).

5.3.4 Objective 4

Determine the moderating effect that job satisfaction has on the relationship between psychological contract breach and work engagement.

- H_{04} : Job satisfaction has no moderating effect on the relationship between psychological contract breach and work engagement.
- H_{a4} : Job satisfaction has a moderating effect on the relationship between psychological contract breach and work engagement.

Table 14: Objective 4 - Statistical analysis.

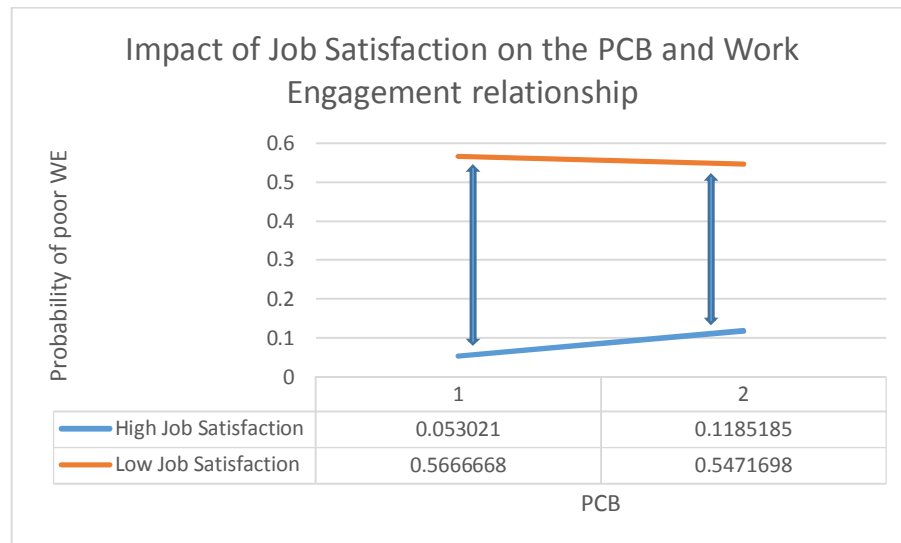
Dependent variable:	Work engagement	
	Analysis P value	
Model	<.0001*	
R-Squared	0.5299	
Independent & moderator variables:	Effect of explanatory variable	
Psychological contract breach	0.21498	P value of variable <.0001*
Job satisfaction	2.07514	<.0001*
PCBJS (measure of the moderator effect)	-0.18626	0.020*
* p-values < 0.05		

The correlation between job satisfaction and PCB was 0.5941 and it is significant ($p < 0.0001$). The p-value for the regression analysis is significant ($p < 0.0001$). The multi variable regression analysis that was done to explore if job satisfaction is a moderator on the relationship between PCB and work engagement had the following results:

- Psychological contract breach was found to have a significant ($p < 0.0001$) effect.
- Job satisfaction was found to have a significant ($p < 0.0001$) effect.
- The interaction between PCB and job satisfaction on work engagement was also found to be significant ($p = 0.020$) and the null-hypothesis, H_{04} , was rejected.
- It was concluded that the overall fit of the model of Objective 4 is significant and the alternate hypothesis, H_{a4} , is confirmed. It is therefore concluded that job satisfaction is a moderator for the relationship between PCB and work engagement and that it reduces the effect that PCB has on work engagement.

A logistic regression was run and predictive margins were reported to explore the extent of the effect that job satisfaction has on the relationship as a moderator (see Figure 17).

Figure 17: Impact of job satisfaction as moderator on the relationship between PCB and work engagement.



Source: Author's own

The significant effect of job satisfaction is illustrated above with the difference on the probability of poor work engagement (WE) axis between the two lines. When good job satisfaction was introduced to a tolerable (low) level (1) of PCB it was found to reduce the probability of poor work engagement more than 10.6 times. When good job satisfaction was introduced to an intolerable (high) level (2) of PCB it was found to reduce the probability of poor work engagement more than 4.6 times. This confirms how significant the moderator effect of job satisfaction is on the relationship between PCB and work engagement.

5.3.5 Objective 5

Determine the moderating effect of organizational support on the relationship between psychological contract breach and work engagement.

- H_{05} : Organizational support has no moderating effect on the relationship between psychological contract breach and work engagement.
- H_{a5} : Organizational support has a moderating effect on the relationship between psychological contract breach and work engagement.

Table 15: Objective 5 - Statistical analysis

Dependent variable:		Work engagement	
		Analysis of variance P value	
Model		<.0001*	
R-Squared		0.3917	
		Parameter estimate of explanatory variable	
Independent & moderator variable:			P value of variable
Psychological contract breach		0.11316	<0.173
Organizational support		0.45429	<.0001*
PCBOS (measure of the moderator effect)		0.00206	0.483

* p-values < 0.05

The correlation between organizational support and PCB was 0.7054 and it is significant ($p < 0.0001$). The p value for the regression analysis is significant ($p < 0.0001$). The multi variable regression analysis that was done to explore if organizational support is a moderator on the relationship between PCB and work engagement had the following results.

- Psychological contract breach was found not to have a significant ($p = 0.173$) effect.
- Organizational support was found to have a significant ($p < 0.0001$) effect.
- The interaction between PCB and organizational support on work engagement was also found not to be significant ($p = 0.483$).
- The alternate hypothesis, H_{a5} , is rejected and the null hypothesis is confirmed. It is therefore concluded that organizational support is not a moderator for the relationship between PCB and work engagement.

5.3.6 Summary table

Table 16: Summary of objectives

	Explanatory variable	Moderator variable	Dependent variable	Model Significant Y/N	R-squared	P Value of moderator variable	Null hypothesis rejected and alternate hypothesis confirmed
Hypothesis 1	Psychological contract breach	None	Work engagement	Yes	0.2456	N/A	Yes
Hypothesis 2	Job satisfaction	None	Work engagement	Yes	0.5205	N/A	Yes
Hypothesis 3	Organizational support	None	Work engagement	Yes	0.3846	N/A	Yes
Hypothesis 4	Psychological contract breach	Job satisfaction	Work engagement	Yes	0.5299	0.020*	Yes
Hypothesis 5	Psychological contract breach	Organizational support	Work engagement	No	0.3971	0.483	No

*p-values < 0.05

Chapter 6: Discussion of results

6.1 Chapter introduction

The results of each of the five objectives with their underlying hypothesis will now be discussed. Reference will be made to the relevant literature and theory outline in Chapter 2.

6.2 Discussion of results

6.2.1 Objective 1 . Discussion of results

Figure 18: Alternative hypothesis 1.



Source: Author's own

Objective 1: Determine the relationship between psychological contract breach and work engagement.

- H_0 1: There is no linear relationship between psychological contract breach and work engagement.
- H_a 1: There is a linear relationship between psychological contract breach and work engagement.

The null hypothesis is concluded and is rejected and the alternate hypothesis is confirmed. A significant correlation is confirmed to exist between psychological contract breach and work engagement. The coefficient of the correlation was calculated at r equals to 0.2456 with a p value of <0.0001 . The R-Square value of 0.2456, if expressed as a percentage (24.56%), confirms that 24.56% of the variation in the dependent variable, work engagement is explained by the variation in the explanatory variable, psychological contract breach.

Some of the previous literature shows that there is no significant direct linear relationship between PCB and work engagement (Rayton & Yalabik, 2014). This study's findings,

however, differ with this and confirm a significant direct linear relationship between PCB and work engagement which indicates that PCB negatively affects work engagement. The literature discussed in Chapter 2 confirms the consequences that work engagement have for the employee and the organisation (Blackwell, 2014). For the employee these consequences include:

- organizational commitment
- personal initiative
- low intention to leave
- low sickness absence
- increased job performance
- organizational citizenship behaviour (Blackwell, 2014; Rayton & Yalabik, 2014).

For the organisation benefits include:

- low staff turnover
- customer satisfaction
- innovativeness
- productivity
- profitability
- competitive advantage (Gallup, 2013; Schuck et al., 2011; Ten Brummelhuis & Bakker, 2012).

Psychological contract breach has destructive consequences and should therefore be understood in relation to its relationship with work engagement to reduce these consequences (Morrison & Robinson, 1997). Psychological contract breach is determined by three factors that include:

- attribution,
- severity
- time of breach (Eckerd et al., 2013).

It is clear from the findings of this study that it is beneficial for both the employer and the organisation to improve the relationship between PCB and work engagement because it is significant and, if not managed, destructive. Taking into account the consequences of improved work engagement, organisations can improve their chances of success by reducing the frequency and severity of PCB.

These findings are based on how employees perceive the level of contract breach that they experience - albeit subjective. It would, therefore, be advantageous to the

organisation to understand the type of psychological contracts that it has with the employees (their expectations and their experiences of the development of its violation) to enable the organisation to proactively manage these perceptions of PCB and to reduce psychological distress and improve work engagement (Rodwell & Ellershaw, 2015).

6.2.2 Objective 2 . Discussion of results:

Figure 19: Alternative hypothesis 2.



Source: Author's own

Objective 2: Determine the relationship between job satisfaction and work engagement.

- H_0 2: There is no linear relationship between job satisfaction and work engagement.
- H_a 2: There is a linear relationship between job satisfaction and work engagement.

The null hypothesis was concluded and rejected and the alternate hypothesis was confirmed. A significant correlation was confirmed to exist between job satisfaction and work engagement. The coefficient of the correlation was calculated at r equals to 0.5205 with a p value of <0.0001 . The R-Square value of 0.5205 if expressed as a percentage (52.05%) confirms that 52.05% of the variation in the dependent variable, work engagement is explained by the variation in the explanatory variable, job satisfaction.

The findings of this study add further empirical evidence that supports previous literature that found a significant relationship between job satisfaction and work engagement. (Rayton & Yalabik, 2014). Rayton and Yalabik focussed on the mediating effect that job satisfaction has on the relationship between PCB and work engagement.

The literature discussed in Chapter 2 describe job satisfaction and work engagement as positive states in relation to burnout and workaholism that are seen as negative states

(Blackwell, 2014). This is displayed in Figure 20 below showing that engagement includes emotional states that are:

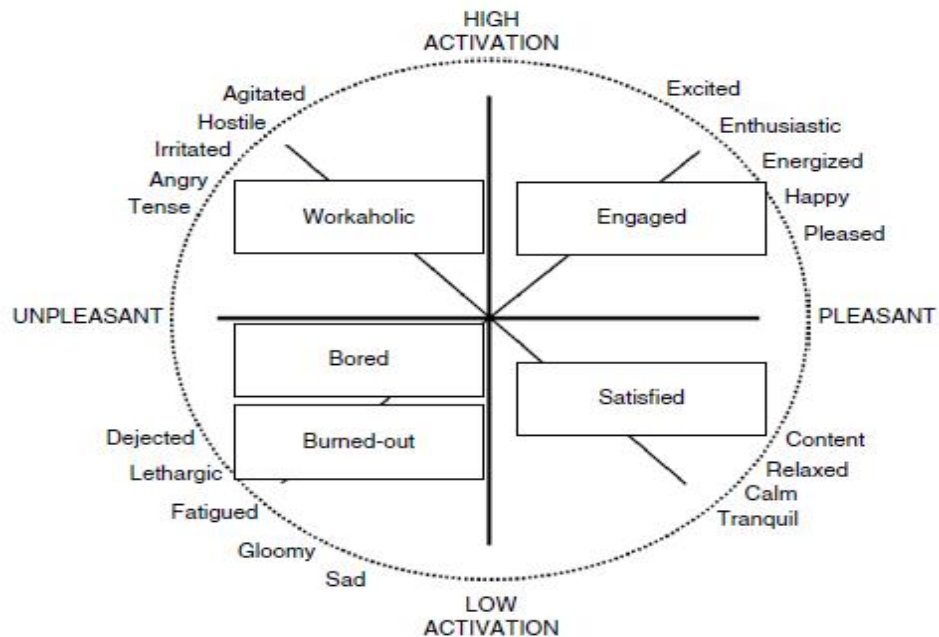
- excited
- enthusiastic
- energised
- happy
- pleased.

Job satisfaction includes emotions that are:

- content
- relaxed
- calm
- tranquil.

The difference between work engagement and job satisfaction is related to the level of activation, with work engagement having a higher level of activation than job satisfaction as can be seen in Figure 20 below.

Figure 20: A taxonomy from work-related well-being adapted from Russell, 1980+(Blackwell, 2014, p. 302).



The results of this study emphasise the importance for organisations to understand the impact that job satisfaction has on work engagement and how this knowledge can be beneficial for the organisation since both can contribute to employee and organizational success. On an employee level, job satisfaction contributes to higher: a) organizational commitment, b) productivity and c) performance which then contribute positively to organisations (Ahmed & Khan, 2015; Petty et al., 1984). Organisations benefit by: a) improving customer satisfaction, b) innovativeness, c) productivity, d) profitability and e) giving the organisation a competitive advantage (Gallup, 2013; Schuck et al., 2011; Ten Brummelhuis & Bakker, 2012).

By understanding the relationship between job satisfaction and work engagement, organisations need to improve the sum of the evaluations of the combination of the different tasks performed and discriminable elements that together form a job (Locke, 1969). This would increase work engagement by ensuring job satisfaction.

6.2.3 Objective 3 . Discussion of results:

Figure 21: Alternative hypothesis 3



Source: Author's own

Objective 3: Determine the relationship between organizational support and work engagement.

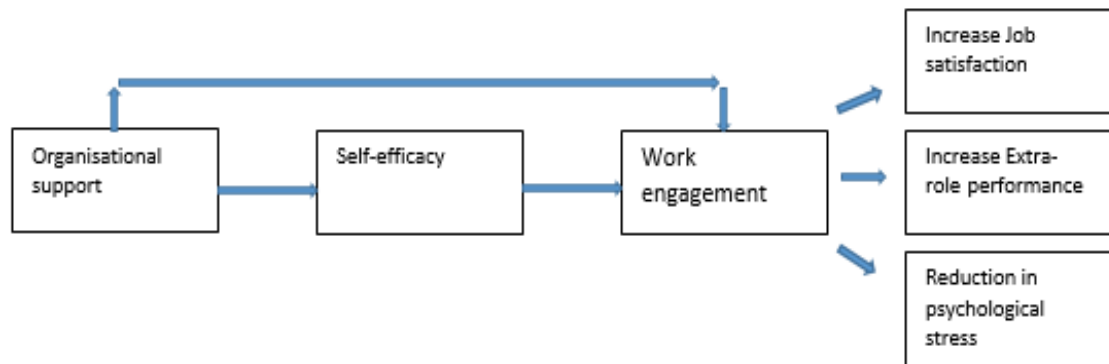
- H_0 3: There is no linear relationship between organizational support and work engagement.
- H_a 3: There is a linear relationship between organizational support and work engagement.

The null hypothesis was concluded as rejected and the alternate hypothesis was confirmed. A significant correlation was confirmed to exist between organizational support and work engagement. The coefficient of the correlation was calculated at r equals to 0.3846 with a p value of <0.0001 . The R-Square value of 0.3846, if expressed as a percentage, (38.46%) confirms that 38.46% of the variation in the dependent

variable, work engagement is explained by the variation in the explanatory variable, organizational support.

The findings of this study add further empirical evidence that support previous literature that found a significant relationship between organizational support and work engagement (Caesens & Stinglhamber, 2014). Caesens and Stinglhamber focussed on the effect that organizational support has on work engagement by looking at the direct relationship as well as the mechanics through which organizational support has this effect. They found that work engagement has a direct effect but also work through self-efficacy has an effect on work engagement (Caesens & Stinglhamber, 2014).

Figure 22: “The effect that organizational support has on work engagement and the consequences adjusted” (Caesens & Stinglhamber, 2014, p. 264-265)



The literature in Chapter 2 discusses the impact that organisational support, as a job resource, has on various relationships in the JD-R model that result in either higher or lower levels of work engagement (Bakker & Demerouti, 2007). Job demands increase stress levels which impact negatively on work engagement but job resources reduce this stress impacting positively on work engagement (Bakker & Demerouti, 2007). This higher level of work engagement translates into higher levels of performance that enable employees to create their own resources. They do this by applying job crafting that further impacts positively on engagement and creates a spiral effect that then increases work engagement (Bakker, 2011).

This positive effect encourages employees to achieve their goals through encouraged motivated learning, personal growth and development (Schaufeli & Bakker, 2004). This creates a sense of satisfaction for them towards their work, which is a pleasant emotional state for employees (Aziri, 2011; Locke, 1969). It also has a positive impact on employee absenteeism by reducing it and by increasing the employees effective commitment and

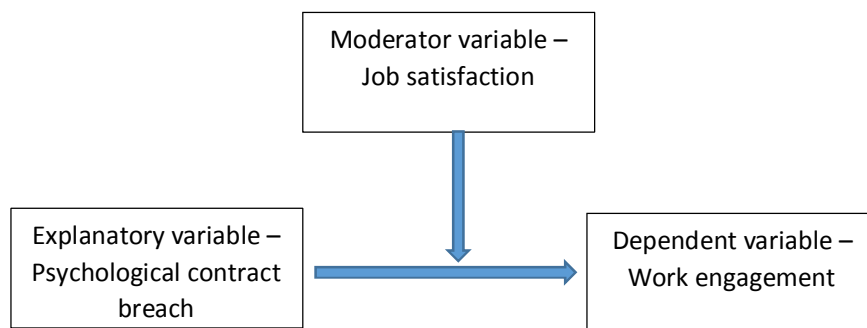
performance to the organisation due to an expectancy that greater work effort will be rewarded (Eisenberger et al., 1986). Further implications for employees are a positive experience at work that gives them confidence to act assertively and to play an active role in their own career development that contributes positively to their work performance.

For organisations, the benefits of employees being engaged and satisfied with their jobs include:

- improving customer satisfaction
- innovativeness
- productivity
- profitability
- giving the organisation a competitive advantage (Gallup, 2013; Schuck et al., 2011).

6.2.4 Objective 4 . Discussion of results

Figure 23: Alternative hypothesis 4



Source: Author's own

Objective 4: Determine the moderating effect that job satisfaction has on the relationship between PCB and work engagement.

- H₀4: Job satisfaction has no moderating effect on the relationship between psychological contract breach and work engagement.
- H_a 4: Job satisfaction has a moderating effect on the relationship between psychological contract breach and work engagement.

The interaction between PCB and job satisfaction on work engagement is found to be significant ($p = 0.020$). The null-hypothesis, H_{04} , is rejected. It is concluded that the overall fit of the model of Objective 4 is significant and the alternate hypothesis, H_{a4} , is confirmed. It is concluded that job satisfaction is a moderator for the relationship between psychological contract breach and work engagement. The effect of job satisfaction as moderator on the relationship between PCB and work engagement is that it reduces the negative impact that PCB has on work engagement.

Chapter 2 discusses previous literature where job satisfaction was researched as a moderator for job success in 1971. Another study in 2015 explores if job satisfaction is a moderator or a mediator on the relationship between change leadership and commitment to change. Whereas in 1971, it was found that job satisfaction is a moderator in the prediction of job success (Betz, 1971), in the 2015 study it was found that job satisfaction is a mediator in the relationship between change leadership and commitment to change (Wulandari, Mangundjaya, & Utoyo, 2015). However, in 2014 Rayton en Yalibik's study on the relationship between PCB and work engagement with job satisfaction as mediator found that this relationship between PCB and work engagement is more complex than what previous research suggested. They found that job satisfaction has a mediating effect on the relationship between PCB and work engagement (Rayton & Yalabik, 2014).

The conclusion that job satisfaction moderates the relationship between PCB and work engagement is research data that both employees and organisations should consider. Whether it is employees who assess their jobs or organisations that assess the environment they create for their employees - including job fit - both stand to gain from the understanding of the relationship. It is therefore important for organisations to comprehend the impact that job satisfaction has because previous research has confirmed that there are significant relationships between work engagement and the performance and success of organisations through the competitive advantage as a result of employees being engaged in their work. (Scrima et al., 2014).

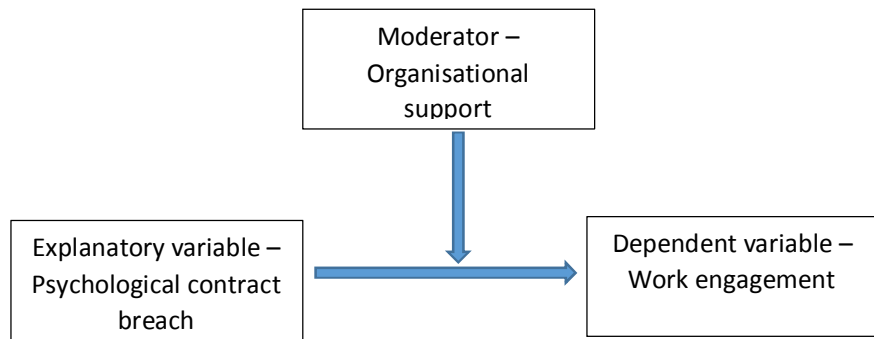
Some research in the literature states that job satisfaction is a consequence of work engagement and others state it is a predictor of work engagement (Bakker & Demerouti, 2007; Simpson, 2009). This study adds to the literature and confirms that job satisfaction moderates the relationship between PCB and work engagement by reducing the negative effects of PCB which results in higher levels of engagement.

The finding is particularly important for organisations going through adverse changes (resource losses) that are seen by employees as the breach of a psychological contract. This study has shown that organisations ought to commit their limited resources to

increase job satisfaction during these periods of change. The increased level of their employees job satisfaction will impact on the perceived psychological breach by moderating the effect of PCB on work engagement . and thus reduce the probability of poor work engagement. This understanding, therefore, should ensure that organisations focus on the areas with the biggest impact for competitive advantage when they have limited resources in times of change (Chaundhry & Song, 2014; Scrima et al., 2014).

6.2.5 Objective 5 . Discussion of results.

Figure 24: Null hypothesis 5



Source: Author's own

Objective 5: Determine the moderating effect of organisational support on the relationship between psychological contract breach and work engagement.

- H₀5: Organisational support has no moderating effect on the relationship between psychological contract breach and work engagement.
- H_a5: Organisational support has a moderating effect on the relationship between psychological contract breach and work engagement.

The interaction between PCB and job satisfaction on work engagement is found not to be significant ($p = 0.483$). It is concluded that the null hypothesis will be accepted and that the alternate hypothesis is rejected. While a very small moderator effect of 0.00206 was found, it is therefore confirmed that organisational support does not have a significant moderating effect on the relationship between PCB and work engagement.

Previous literature, with reference to the JD-R model, indicates that job resources, including organisational support reduce job demands (including mental and emotional

demands) (Bakker & Demerouti, 2007). This study, however, does not support this finding. It finds that the moderating effect of organisational support is not significant.

This is an important finding for organisations to understand where they should focus limited resources to maximise impact. Organisations have to ensure that money and effort spent on organisational support is done in a way that it has the desired effect.

Although organisational support is not significant as a moderator it still has a significant linear relationship with work engagement. This explains 38.46% of the variation in work engagement as a result in the variation in organisational support. This highlights the fact that organisational support is important for organisations that strive to have engaged employees. Therefore it is important for organisational focus to be directed in a way that they influence work engagement effectively. And this is through organisational support without focussing on organisational support as a moderator.

Chapter 7: Conclusion

7.1 Chapter introduction and main findings

The purpose of the study is to explore the relationship between psychological contract breach, job satisfaction and organisational support and work engagement as well as to explore the moderating effect that job satisfaction and organisational support have on the relationship between psychological contract breach and work engagement. The relationship between PCB and work engagement has been previously researched and two different views are held. One that believes there is no direct relationship between PCB and work engagement, and one that believes there is a direct relationship (Rayton & Yalabik, 2014). The results from this study support the view that there is a significant direct relationship between PCB breach and work engagement as confirmed by the results of Hypothesis 1 with a correlation of $r = 0.2456$. This confirms that work engagement is negatively affected by psychological contract breach.

The positive outcomes that work engagement have for employees and organisations have also been previously researched and confirmed to include:

- a) higher employee performance (Salanova, Agut, & Peiro, 2005);
- b) lower staff turnover (Gallup, 2013; Harter et al., 2002);
- c) increased organisational citizenship behaviour; and
- d) improved task performance (Rich et al., 2010).

Positive organisational outcomes as a result of increased work engagement levels include:

- a) performance;
- b) profitability (Harter et al., 2002); and
- c) a competitive advantage (Schuck et al, 2011).

All these outcomes confirm the importance of cultivating higher levels of work engagement.

Job satisfaction has been a topic for research for several years dating back as far as 1935 when Haprock described it as any combination of psychological and environmental circumstances that will result in a person saying that he is satisfied with his work (Aziri, 2011). This study adds additional knowledge to the research by exploring the effect that job satisfaction has as a moderator on the relationship between other constructs, psychological contract breach and work engagement - which have not been researched

before. It is confirmed by Hypothesis 4 in this study that job satisfaction has a moderating effect on the relationship between psychological contract breach and work engagement.

Job satisfaction has also been researched as a mediator on the relationship between psychological contract breach and work engagement where it was confirmed that it does have a mediating effect on the relationship (Rayton & Yalabik, 2014). The positive consequences of job satisfaction for both employees and organisations are well documented. These include:

- a) an increase in productivity (Adenike, 2011);
- b) higher levels of organisational commitment (Adenike, 2011);
- c) lower employee absenteeism (Artz & Kaya, 2014); and
- d) lower levels of intention to quit (Artz & Kaya, 2014).

Organisational support as a topic of research has been covered comprehensively. The development of global beliefs by employees that organisations care for their well-being and value their contributions is described as organisational support (Eisenberger et al., 1986). This study contributed to the research done on organisational support by exploring the effect that it has on the relationship between PCB and work engagement. It was confirmed in Hypothesis 5 that organisational support does not have a significant effect on the relationship between PCB and work engagement.

Despite this conclusion that organisational support does not have a significant effect on the relationship between PCB and work engagement this study's Hypothesis 3 finds that there is a significant linear relationship between organisational support and work engagement. This supports previous literature that confirms positive outcomes related to organisational support. These outcomes include:

- a) effective involvement in the organisation;
- b) innovation without expecting direct rewards; or
- c) recognition and conciseness in carrying out job responsibilities (Eisenberger et al., 1990).

The results of this study confirm that various constructs have an effect on work engagement which can be utilised to improve work engagement.

The study's objectives where the alternate hypothesis is rejected and the null hypothesis confirmed with regard to not having a significant impact includes:

- Hypothesis 5: Organisational support has no moderating effect on the relationship between psychological contract breach and work engagement.

The objectives where the alternate hypothesis is confirmed and the null hypothesis rejected with regard to having a significant impact includes:

- Hypothesis 1: There is a linear relationship between psychological contract breach and work engagement.
- Hypothesis 2: There is a linear relationship between job satisfaction and work engagement.
- Hypothesis 3: There is a linear relationship between organisational support and work engagement.
- Hypothesis 4: Job satisfaction has a moderating effect on the relationship between psychological contract breach and work engagement.

This study concludes from the findings that:

- Psychological contract breach has an adverse effect on work engagement.
- Job satisfaction and organisational support have a direct positive effect on work engagement.
- Job satisfaction has a moderating effect on the effect on the adverse effects that psychological contract breach has on work engagement.
- Organisational support does not have a moderating effect on the adverse effects that psychological contract breach have on work engagement.

The findings in Objective 5 do not support the JD-R model in so far as it states that job resources reduce job demands which translate into increased work engagement. Although this was not part of the scope of this study, it would be interesting to look into the reasons as to why organisational support does not have a significant impact on the adverse effects that PCB has on work engagement. The findings in Objective 4 support previous literature on the mediating effect that job satisfaction has on PCB in terms of work engagement as well as the previous research that confirms job satisfaction is a predictor of work engagement (Simpson, 2009).

7.2 Managerial implications

Improved levels of work engagement at organisations is possible if organisations understand the relationship and effects that other variables like job satisfaction, organisational support and psychological contract breach have with work engagement.

7.2.1 Psychological contract breach

It was confirmed by the results of this study that a low to below medium level of psychological contract breach is experienced by the respondents of the study. It was further confirmed that the higher the level of psychological contract breach is experienced the lower the levels of work engagement by employees. The study went further to explore the effect that moderators (e.g. job satisfaction and organisational support) have on the effect that psychological contract breach has on work engagement. It was found that job satisfaction has a significant moderating effect while organisational support does not have a significant moderating effect.

Organisations should determine what type of psychological contracts have been formed between the organisation and the employees. To decide what the best approach will be to manage these different contracts they could include:

- relational contracts,
- balanced contracts
- transitional contracts
- transactional contracts (Scheepers & Shuping, 2011).

Furthermore, organisations need to understand the severity of the psychological contract breach across these different contracts by evaluating the following three factors that include:

- attribution,
- severity
- time of breach (Eckerd et al., 2013).

Once this is done, organisations will be able to identify opportunities where PCB can be reduced effectively to acceptable levels by improving the level of job satisfaction experienced by their employees. This will have positive consequences with regard to the level of work engagement in which these employees will engage.

7.2.2 Organisational support

It was confirmed by the results of this study that the respondents are experiencing low levels of organisational support. It is confirmed that the higher the level of organisational support is experienced, the higher level of work engagement one can expect. The study went further to explore the effect of organisational support as a moderator on the effect that psychological contract breach has on work engagement. It was found that organisational support does not have a significant moderating effect.

It is important for organisations to understand how organisational support can have an effective impact in their organisations. One of the positive outcomes of organisational support is work engagement. Job demands (not only PCB) increase stress levels through risk factors that is related to the various occupations (Bakker & Demerouti, 2007). Organisational support can be used as a job resource to reduce these stress levels that will assist employees to be successful with their goals. It will also encourage them to take up further training and education as well as support personal growth and development (Bakker & Demerouti, 2007).

If employees develop the belief that their organisation cares about their well-being and that it values their contribution, they will reciprocate by being more involved in the organisation, carry out their jobs with responsibility, and they will be innovative without expecting additional rewards (Eisenberger et al., 1990). It is important for organisations to understand that this can be done by linking rewards and favourable working conditions to organisational support by creating opportunities to:

- a) expand employees skills;
- b) improve quality of training (e.g. provide autonomy on how jobs are carried out);
and
- c) gain recognition from management (Aselage & Eisenberger, 2003; Leppel et al., 2012).

Employees who experience higher levels of organisational support will be open to risk-taking when they do their jobs and innovate on behalf of the organisation. This is of importance for companies who want to ensure that they maintain their competitive advantage to stay ahead of the curve with regard to the next big step-change in the dynamic competitive industries where they compete.

Changing environments are critical times to influence perceptions as to why organisations take on these changes. It is through open communication and adequate

organisational support that organisations successfully implement these changes effectively. This can be done by focussing on only the necessary changes and by involving employees in the process to assist them to own it through their input and a greater voice and by reducing uncertainties (Cullen et al, 2014).

7.2.3 Job satisfaction

It is confirmed by the results of this study that the respondents are experiencing high levels of job satisfaction. It was confirmed that the higher the level of job satisfaction is experienced the higher level of work engagement one can expect. The study went further to explore the effect of job satisfaction as a moderator on the effect that PCB has on work engagement. It was found that job satisfaction does have a significant moderating effect.

To increase work engagement it is important for organisations to understand how job satisfaction affects work engagement and the relationship between PCB and work engagement. Job satisfaction is an emotional state and has to do with how an employee feels about his job and what he thinks of his job (Locke, 1969; Rayton and Yalabik, 2014). The better organisations understand this dynamic and the relationship it has with other factors, the more effective they can apply limited resources and capacity. Job satisfaction is not only a consequence of work engagement, but it can also predict/improve work engagement. If organisations increase job satisfaction they will ensure that employees are more productive, and that they have higher levels of organisational commitment.

High levels of job satisfaction, according to Rue and Byaes (2003), will reduce absenteeism, tardiness, accidents, strikes, grievances, sabotage and the intention to leave the organisation (as cited in Aziri, 2011). Employees that are satisfied with their jobs become more engaged and by making sure that managers are concerned about their staff, jobs should be designed by organisations to ensure:

- a) the appropriate level of scope;
- b) depth;
- c) interest and perceived value;
- d) compensation is benchmarked according to industry and across the organisation;
- e) appropriate working conditions;
- f) healthy social relationships;

- g) career development opportunities exist within and outside of the organisation;
and
- h) levels of aspiration and need are met (Aziri, 2011).

The benefits for organisations of having a workforce that is satisfied with their jobs have been confirmed in various studies. Companies who are able to increase the job satisfaction levels of their employees will be able to attract talented employees. This will ensure better performance than their rivals as a result of the competitive advantage that it creates (Peteraf & Barney, 2003).

7.2.4 Work engagement

It was confirmed by the results of this study that work engagement has relationships with other factors. The factors included in the study were psychological contract breach, job satisfaction and organisational support. It is important to note that these are only some of the constructs that influence work engagement and the list is by no means exhausted. Both job satisfaction and organisational support are also explored in their capacities as moderators in the relationship between psychological contract breach and work engagement. It is found that work engagement is influenced by all three factors: negatively by psychological contract breach and positively by organisational support and job satisfaction.

The benefits for employees and organisations when work engagement levels are high have been confirmed in the literature. For employees this includes those who are:

- a) energised to do their work;,
- b) happy in what they do;
- c) effectively committed to the organisation;
- d) willing to put effort into their work; and
- e) persistent even in difficult times (Schaufeli et al., 2006).

All these traits are important when organisations aim to be successful in the domain where they compete. For organisations the benefits of an engaged workforce include:

- a) better performance;
- b) higher levels of service quality;
- c) better customer satisfaction;
- d) better innovation; and

- e) improved profitability (Blackwell, 2014; Gallup, 2013) TenBrummelhuis & Bakker; Rayton and Yalabik, 2014).

It is recommended that organisations measure the levels of work engagement in their organisation to establish a base from which decisions can be made and actions planned to improve the levels of work engagement. It is important that work engagement is not seen in isolation but within the eco system of which it is a part. This will enable organisations to focus limited resources and management capacity to have the highest impact on work engagement possible. If companies are able to effectively increase the level of work engagement they will create a competitive advantage for themselves that will make them more successful than their competitors.

7.3 Limitations to the research

- The research is conducted as a cross-sectional study due to time constraints, which does not provide the depth of analysis of a longitudinal study.
- The research investigates the casual relationship between psychological contract breach, organisational support, job satisfaction and work engagement, but does not examine other factors that influence work engagement.
- The study is done within the boundaries of South Africa and does not include cross border respondents intentionally.
- The study only includes respondents with access to email and internet.
- The nature of the business of the service provider can attract people with similar beliefs and values and this can exclude people with other beliefs and values.
- The study was done within the boundaries of South Africa and did not include other African or world countries.

7.4 Recommendations for future research

- The study was limited to one country, and it is recommended that future research is done across borders to explore differences and similarities.
- The study is done as a cross-sectional study due to time constraints. It is recommended that a longitudinal study be done to add more depth.
- As this study focussed on the moderating role of organisational support it is suggested that the mediating role is explored in future research.

- As this study focusses on psychological contract breach and the impact of moderators, it is suggested that future research look at the different psychological contracts and the breach in the different contract categories to determine if job satisfaction and organisational support have different effects across the different contracts when they are breached.
- It is suggested that future research explore other factors that might play a role in the psychological contract breach . work engagement relationship.

7.5 Conclusion

The objectives of this study were focussed on exploring the relationship between the individual constructs PCB, job satisfaction, organisational support and that of work engagement as well as to ascertain whether job satisfaction and organisational support has a moderating effect on the relationship between PCB and work engagement. It was concluded that PCB, job satisfaction and organisational support individually have a significant relationship with work engagement where $p < 0.05$. The moderating effect of job satisfaction on the relationship between PCB and work engagement was concluded but organisational support was concluded to not have moderating effect on the relationship between PCB and work engagement.

It was concluded that an increase in PCB levels has a negative effect on work engagement and that an increase in organisational support and job satisfaction has a positive effect on work engagement. It was further concluded that job satisfaction reduce the negative effect that PCB has on work engagement. The benefits to organisations and employees when work engagement levels are high have been researched and confirmed. When better understood these relationships that exist between work engagement and other constructs can be influenced to improve the level of work engagement to the benefit of organisation and the employees.

References

- Adenike, A. (2011). Organisational climate as a predictor of employee job satisfaction: Evidence from Covenant University. *Business Intelligence Journal*, 4(1), 151-165.
- Africa, I. W. (2015, February 16). *New Development in Telkom's turnaround strategy*. Retrieved from ITwebafrica: <http://www.itwebafrica.com/telecommunications/325-south-africa/234175-new-development-in-telkoms-turnaround-strategy>
- Ahmad, A., & Khan, S. (2015). Psychological contract breaches and its impact on employee turnover intention and job satisfaction. *European Journal of Business and Management*, 7(10), 31-39.
- Artz, B., & Kaya, I. (2014). The impact of job security on job satisfaction in economic contractions versus expansions. *Applied Economics*, 46(24), 2873-2890.
- Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior*, 24, 491-509.
- Attridge, M. (2009). Measuring and managing employee work. *Journal of Workplace Behavioral Health Engagement: A Review of the Research and Business Literature*, 24, 383-398.
- Aziri, B. (2011). Job Satisfaction: A literature review. *Management Research and Practice*, 3(4), 77-86.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265-269.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Work engagement: Further reflections on the state of play. *European Journal of Work and Organisational Psychology*, 20(1), 74-88.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organisational Psychology*, 20(1), 4-28.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223.

- Bakker, A. B., Demerouti, E., & Xanthopoulou, D. (2012, March 01). How do engaged employees stay engaged? *Ciencia & Trabajo*, special issue, 15-21.
- Bakker, A. B., & Leiter, M. P. (2010). *Work engagement - A handbook of essential theory and research*. New York: Psychology Press.
- Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance. The role of jobcrafting and work engagement, *Journal of Human Relations*, 65(10), 1359-1378.
- Bal, M. P., Chiaburu, D. S., & Jansen, P. G. (2010). Psychological contract breach and work performance Is social exchange a buffer or an intensifier?, *Journal of Managerial Psychology*, 25(3), 252-273.
- Betz, E. L. (1971). An Investigation of job satisfaction as a moderator variable in predicting job success, *Journal of Vocational Behaviour*, 1, 123-128.
- Blackwell, W. (2014). *An introduction to contemporary work psychology*. Chichester: John Wiley & Sons Ltd.
- Botha, C., & Mostert, K. (2014). A structural model of job resources, organisational and individual strengths use and work engagement. *SA Journal of Industrial Psychology*, 40(1), 11 pages.
- Bowling, N. A., & Hammond, G. D. (2008). A meta-analytic examination of the construct validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale. *Journal of Vocational Behavior*, 73, 63-77.
- Breevaart, K., Bakker, A. B., Demerouti, E., & Hetland, J. (2012). The measurement of state work engagement. *European Journal of Psychological Assessment*, 1-8.
- Caesens, G., & Stinglhamber, F. (2014). The relationship between perceived organizational support and work engagement: The role of self-efficacy and its outcomes. *European Journal of Applied Psychology*, 64, 259-267.
- Chaundhry, A., & Song, L. J. (2014). Rethinking psychological contracts in the context of organizational change: The moderating role of social comparison and social exchange. *The Journal of Applied Behavioral Science*, 50(3), 337-363.
- Chen, Z. X., Tsui, A. S., & Zhong, L. (2008). Reactions to psychological contract breach: A dual perspective. *Journal of Organizational Behavior*, 29(5), 527-548.
- Cho, J., Laschinger, H.K., & Wong, C. (2006) Work engagement and organizational commitment of new graduates. *Nursing Leadership*, 19(3), 43-60.

- Clifton, J., & Marlar, J. (2011, March 15). *Worldwide, good job linked to higher wellbeing*. Retrieved from Gallup.com: <http://www.gallup.com/poll/146639/worldwide-good-jobs-linked-higher-wellbeing.aspx>
- Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834-848.
- Cullen, K. L., Edwards, B. D., Casper, C., & Gue, K. (2014). Employees' adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. *Journal of Business Psychology*, 29, 269-280.
- Eckerdt, S., Hill, J., Boyer, K. K., Donohue, K., & Ward, P. T. (2013). The relative impact of attribute, severity, and timing of psychological contract breach on behavioral and attitudinal outcomes. *Journal of Operations Management*, 31, 567-578.
- Ederle, R. (2014, October 17). *BMC turnaround; A lesson in corporate leadership*. Retrieved from CIO: <http://www.cio.com/article/2835322/ceo-role/bmc-turnaround-a-lesson-in-corporate-leadership.html>
- Eisenberger, R., Fosolo, P., & Davis-Lemastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75(1), 51-59.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organisational support. *Journal of Applied Psychology*, 71(3), 500-507.
- Eisenberger, R., & Stinglhamber, F. (2011). *Perceived organisational support*. Washington DC: American Psychological Association, 25-60.
- Eisenberger, R., Stinglhamber, F., & Vandenberghe, C. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565-573.
- Feloni, R. (2014, February 10). *How Lego came back from the brink of bankruptcy*. Retrieved from Business Insider: <http://www.businessinsider.com/how-lego-made-a-huge-turnaround-2014-2>
- Gakovic, A., & Tetrick, L. E. (2003). Psychological contract breach as a source of strain for employees. *Journal of Business and Psychology*, 18(2), 235-246.
- Gallup Inc. (2013). *State of the global workforce*. Washington: Gallup.

- Garrick, A., Mak, A. S., Cathcart, S., Winwood, P. C., Bakker, A. B., & Lushington, K. (2014). Psychosocial safety climate moderating the effects of daily job demands and recovery on fatigue and work engagement. *Journal of Occupational and Organizational Psychology*, 87, 694-714.
- Hakenen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43, 495-513.
- Hakenen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 73, 78-91.
- Hallberg, U. E., & Schaufeli, W. B. (2006). Can work engagement be discriminated from job involvement and organisational commitment. *European Psychologist*, 11(2), 119-127.
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. (2002). *Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies*. Washington D.C.: American Psychological Association.
- Hoffman, B. G. (2012). *American icon*. New York: Crown Business.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kaiser, H. F. (1974). An Index Of Factorial Simplicity. *Psychometrika*, 39(1), 31-36.
- Laschinger, S.H.K. & Leiter, M.K. (2006). The impact of nursing work environments on patient safety outcomes: the mediating role of burnout/engagement. *The Journal of Nursing Administration*, 36(5), 259-267.
- Leiter, M.P & Maslach, C. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498-512.
- Leppel, K., Brucker, E., & Cochran, J. (2012). The importance of job training to job satisfaction of older workers. *Journal of Aging & Socioal Policy*, 24, 62-76.
- Llorens, S., Bakker, A. B., Schaufeli, W., & Salanova, M. (2006). Testing the robustness of the Job Demands. Resources model. *International Journal of Stress Management*, 13(3), 378-391.
- Locke, E. A. (1969). What is job satisfaction? *Organisational Behaviour and Human Performance*, 4, 309-336.

- Locke, E. A. (1970). Job satisfaction and job performance: A theoretical analysis. *Organisational Behaviour and Human Performances*, 5, 484-500.
- Mache , S., Vitzthum, K., Klapp, B. F., & Danzer, G. (2014). Surgeon's work engagement: Influencing factors and relations to job and life satisfaction. *The Surgeon Journal of the Royal Colleges of Surgeons of Edinburgh and Ireland*, 12, 181-190.
- Maswanganyi, N. (2014, February 11). *Retrenchment at 10-year high as economy sheds jobs*. Retrieved from Business Day Live :
<http://www.bdlive.co.za/economy/2014/02/11/retrenchments-at-10-year-high-as-economy-sheds-jobs>
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement. *Journal of Vocational Behaviour*, 70, 149-171.
- May, D. R., Gilson, R. L., & Harter , L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11-37.
- Mohammed, F., & Eleswed, M. (2013). Job satisfaction and organizational commitment: A correlational study in Bahrain. *International Journal of Business, Humanities and Technology*, 3(5), 43-53.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violations develop. *Academy of Management Review*, 22(1), 226-256.
- Moskowitz, M., & Levering, R. (2015, March 15). The 100 best companies to work for. *Fortune*, 171(4), 60-72.
- Neves, P., & Eisenberger, R. (2012). Management communication and employee performance: The contribution of perceived organizational support. *Human Performance*, 25, 452-464.
- Neves, P., & Eisenberger, R. (2014). Perceived organizational support and risk taking. *Journal of Managerial Psychology*, 29(2), 187-205.
- Noer, D. M. (2009). *Healing the wounds*. San Francisco: John Wiley & Sons Inc.
- Nunnally, J. C. (1978). *Psychometric theory*. New York : McGraw-Hill.
- Ohanlon, C. (2014, November 13). *The VAR guy*. Retrieved from The VAR Guy:
<http://thevarguy.com/business-technology-solution-sales/111314/alcatel-lucent-turnaround-story-worth-noting>

- Parzefall, M.-R., & Coyle-Shapiro, J. A.-M. (2011). Making sense of psychological contract breach. *Journal of Managerial Psychology*, 26(1), 12-27.
- Peteraf, M. A., & Barney, J. B. (2003). Unraveling the resource-based tangle. *Managerial and Decision Economics*, 24(4), 309-323.
- Petty, M. M., McGee, G. W., & Cavender, J. W. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance. *Academy of Management Review*, 9(4), 712-721.
- Pomirleanu, N., & Mariadoss, B. (2015). The influence of organizational and functional support on the development of salesperson job satisfaction. *Journal of Personal Selling & Sales Management*, 35(1), 33-50.
- Rayton, B. A., & Yalabik, Z. Y. (2014). Work engagement, psychological contract breach and job satisfaction. *The International Journal of Human Resource Management*, 25(17), 2382-2400.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 498-714.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635.
- Richardsen, A.M., Burke, R.J., & Marthinussen, M. (2006). Work and health outcomes among police officers: The mediating role of police cynicism and engagement. *International Journal of Stress Management*, 13(4), 555-574.
- Robinson, S. L., & Morrison, E. W. (2000). The development of psychological contract breach and violation: A longitudinal study. *Journal of Organizational Behaviour*, 21, 525-546.
- Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. *Academy of Management Journal*, 37(1), 137-152.
- Rodwell, J., & Ellershaw, J. (2015). What is exchanged in psychological contracts? Multiple sets of obligations, targeted effort and uncertainty reduction. *Employee Relations*, 37(2), 232-247.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2(2), 121-139.

- Rowden, R. W. (2002). The relationship between workplace learning and job satisfaction in U.S. small to midsize businesses. *Human Resource Development Quarterly*, 13(4), 407-425.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619.
- Saks, A. M., & Gruman, J. A. (2014, June 17). What Do We Really Know About Employee Engagement? *Human Resource Development Quarterly*, 25(2), 155-182.
- Salanova, M., Agut, S., & Peiro, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217-1227.
- Sapa. (2015, March 9). *SAA won't say how many retrenchments* . Retrieved from IOL: <http://www.iol.co.za/business/companies/saa-won-t-say-how-many-retrenchments-1.1829259#.VT-O5aX9nIV>
- Saunders, M., & Lewis, P. (2012). *Doing research in business & management*. Essex: Pearson Education Limited .
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The Measurement of work engagement with a short questionnaire. *Educational and Psychological Measurement*, 66(4), 701-716.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Scheepers, C. B., & Shuping, J. G. (2011). The effect of human resource practices on psychological contracts at an iron ore mining company in South Africa. *SA Journal of Human Resource Management*, 9(1), 139-157.
- Scrima, F., Lorito, L., Lucrezia, E., & Falgares, G. (2014). The mediating role of work engagement on the relationship between job involvement and affective commitment. *The International Journal of Human Resource Management*, 25(15), 2159 - 2173.
- Seligman, M.E.P. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.

- Shih, C.-T., & Chuang, C.-H. (2012). Individual differences, psychological contract breach, and organizational citizenship behavior: A moderated mediation study. *Asia Pacific Journal of Management*, 30(1), 191-210.
- Shoss, M. K., Eisenberger, R., Restubog, S. L., & Zagenczyk, T. J. (2013). Blaming the organization for abusive supervision: The roles of perceived organizational support and supervisor organizational embodiment. *Journal of Applied Psychology*, 98(1), 158-168.
- Shuck, B., Reio Jr, T. G., & Rocco, T. S. (2011). Employee engagement: an examination of antecedent and outcome variables. *Human Resource Development International*, 14(4), 427-445.
- Simpson, M. R. (2009). Engagement at work: A review of the literature. *International Journal of Nursing Studies*, 46, 1012-1024.
- Sonnentag, S. (2011). Commentary - Research on work engagement is well and alive. *European Journal of Work and Organizational Psychology*, 20(1), 29-38.
- Sonnentag, S., Demerouti, E., Mojza, E. J., & Bakker, A. B. (2012). Reciprocal relations between recovery and work engagement: The moderating role of job stressors. *Journal of Applied Psychology*, 97(4), 842-853.
- Swaminathan, S., & Jawahar, D. P. (2013). Job satisfaction as a predictor of organisational citizenship behaviour: an empirical study. *Global Journal of Business Research*, 7(1), 71-80.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 53-55.
- Ten Brummelhuis, L. L., & Bakker, A. B. (2012). Staying engaged during the week: The effect of off-job activities on next day work engagement. *Journal of Occupational Health Psychology*, 2011(2), 445-455.
- Ten Brummelhuis, L. L., Bakker, A. B., Hetland, J., & Keulemans, L. (2012). Do new ways of working foster work engagement? *Psicothema*, 24(1), 113-120.
- Tomprou, M., Rousseau, D. M., & Hansen, S. D. (2015). The psychological contracts of violation victims: A post-violation model. *Journal of Organizational Behaviour*, 36, 561-581.
- Van Scheers, L., & Botha, J. (2014). Analysing relationship between employee job satisfaction and motivation. *Journal of Business and Retail Management Research*, 9(1), 98-109.

- Van Teijlingen, E. R., & Hundley, V. (2001). *The importance of pilot studies*. Guildford: Department of Sociology University of Surrey.
- Wulandari, P., Mangundjaya, W., & Utoyo, D. B. (2015). Is job satisfaction a moderator or mediator on the relationship between change leadership and commitment to change? *Procedia - Social and Behavioral Sciences*, 172, 104-111.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the Job Demands-Resources model. *International Journal of Stress Management*, 14(2), 121-141.
- Xanthopoulou, D., Bakker, A. B., Kantas, A., & Demerouti, E. (2012). Measuring burnout and work engagement: Factor structure, invariance, and latent mean differences across Greece and the Netherlands. *International Journal of Business Science and Applied Management*, 7(2), 40-52..
- Yakola, D. (2014). *Leading companies out of crises*. Boston: McKinsey & Company.
- Yeung, K. (2013, May 19). *Turnaround: Marissa Meyer's first 300 days as Yahoo's CEO*. Retrieved from The Next Web: <http://thenextweb.com/insider/2013/05/19/turnaround-marissa-mayers-first-300-days-as-yahoos-ceo/>

Appendix 1: Online Survey

Online survey

I am doing my research on organisational support, psychological contract breach, job satisfaction and work engagement. You are asked to complete a survey about these constructs. This should take you no more than 10 minutes of your time. Your participation is voluntary and you can withdraw at any time without penalty. All data will be kept confidential. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact me or my supervisor. Our details are provided below.

Researcher Name: Tjaart van der Westhuizen
 Email: 447576@mygibs.co.za
 Phone: 0126444484

Research Supervisor Name: Dr Caren Scheepers
 Email: scheepersc@gibs.co.za
 Phone: 011 771 4228

Section A (Biographical data)

Select the most appropriate option from the drop down list:

How old are you?	
	18-20
	21-25
	26-30
	31-35
	36-40
	41-45
	46-50
	51-55
	56-60
	61-65
	65+

What is your gender?	
	Male
	Female

What is your highest level of education?	
	Other please specify
	Grade 10
	Grade 12
	Technical college
	University undergraduate
	University honours
	University postgraduate
	Higher than University postgraduate

Years' service at current company	
	Less than 1
	1-5
	6-10
	11-15
	16-20
	21-25
	25+

Years' working experience	
	Less than 1
	1-5
	6-10
	11-15
	16-20
	21-25
	26-30
	31-35
	36-40
	41-45
	46-50
	51+

Industry / Sector	
	Agriculture, forestry, fishing and hunting
	Mining, quarrying, and oil and gas extraction
	Utilities
	Construction
	Manufacturing
	Transportation equipment manufacturing
	Wholesale Trade
	Retail Trade
	Transportation and warehousing
	Information and cultural industries
	Finance and insurance
	Real estate and rental and leasing
	Professional, scientific, and technical services
	Management of companies and enterprises
	Administrative and support, waste management and remediation services
	Other please specify

Job Satisfaction

Listed below are statements that represent possible opinions that YOU may have about working at your company. Please indicate the degree of your agreement or disagreement with each statement by selecting the score that best represents your point of view about your job.

- 0 . Strongly agree
- 1 . Moderately agree
- 2 . Slightly agree
- 3 . Neither agree nor disagree
- 4 . Slightly disagree
- 5 . Moderately disagree
- 6 . Strongly disagree

Statement	1	2	3	4	5	6
All in all I am satisfied with my job						
In general I don't like my job						
In general I like working here						

Psychological Contract Breach

Listed below are statements that represent possible opinions that YOU may have about working at your company. Please indicate the degree of your agreement or disagreement with each statement by selecting the score that best represents your point of view about your employer.

- 0 . Strongly agree
- 1 . Moderately agree
- 2 . Slightly agree
- 3 . Neither agree nor disagree
- 4 . Slightly disagree
- 5 . Moderately disagree
- 6 . Strongly disagree

Statement	1	2	3	4	5	6
Almost all the promises made by my employer during recruitment have been kept so far						
I feel that my employer have come through in fulfilling the promises made to me when I was hired						
So far my employer has done an excellent job of fulfilling its promises to me						
I have not received everything promised to me in exchange for my contributions						
My employer has broken many of its promises to me even though I've upheld my side of the deal						

Work Engagement

Listed below are statements that represent possible opinions that YOU may have about working at your company. Please indicate the degree of your agreement or disagreement with each statement by selecting the score that best represents your point of view about your job.

- 0 . Strongly agree
- 1 . Moderately agree
- 2 . Slightly agree
- 3 . Neither agree nor disagree
- 4 . Slightly disagree
- 5 . Moderately disagree
- 6 . Strongly disagree

Statement	1	2	3	4	5	6
At my work I feel like I am bursting with energy						
At my job I feel strong and vigorous						
I am enthusiastic about my job						
My job inspires me						
When I get up in the morning I feel like going to work						
I feel happy when I am working intensely						
I am proud on the work that I do						
I am immersed in my work						
I get carried away when I am working						

Organisational Support

Listed below are statements that represent possible opinions that YOU may have about working at your company. Please indicate the degree of your agreement or disagreement with each statement by selecting the score that best represents your point of view about your company.

- 0 . Strongly agree
- 1 . Moderately agree
- 2 . Slightly agree
- 3 . Neither agree nor disagree

- 4 . Slightly disagree
- 5 . Moderately disagree
- 6 . Strongly disagree

Statement	0	1	2	3	4	5	6
The organisation values my contribution to its well-being							
The organisation fails to appreciate any extra effort from me							
The organisation would ignore any complaint from me							
The organisation really cares about my well-being							
Even if I did the best job possible, the organisation would fail to notice							
The organisation cares about my general satisfaction at work							
The organisation shows very little concern for me							
The organisation takes pride in my accomplishments at work							

Appendix 2: Ethical clearance letter

**Gordon Institute
of Business Science**
University of Pretoria

Dear Mr Tjaart van der Westhuizen

Protocol Number: **Temp2015-01208**

Title: **Organisational support as moderator with job satisfaction as mediator on the effect of psychological contract breach on work engagement**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

GIBS Ethics Administrator

Appendix 3: Turnitin report